

THE ESSAY WRITING SKILLS OF
UNDERGRADUATE STUDENTS

A thesis
submitted in partial fulfilment
of the requirements for the Degree
of
Master of Arts in Education
in the
University of Canterbury
by
David J. Philips

University of Canterbury
1979

CONTENTS

CHAPTER		Page
	ABSTRACT	ix
1	INTRODUCTION	1
2	REVIEW	9
	Essay Writing/Marking Research	9
3	A MODEL FOR ESSAY WRITING RESEARCH	14
	The Essay Writing Model	15
	Assumptions Underlying the Student and Staff Studies	24
	The Research Questions	27
4	METHOD	30
	<u>Part I: Student Study</u>	
	Introduction	30
	Subjects	31
	Essay Writing Questionnaire	32
	Procedure	38
	Main Statistical Analysis	62
	<u>Part II: Staff Study</u>	
	Introduction	64
	Subjects	64
	The Marking and Significant Features of Essays Written by Undergraduate Students Questionnaire	65
	Procedure	68

CHAPTER		Page
5	RESULTS AND DISCUSSION	70
	<u>Part I: Student Study</u>	
	Multivariate Analyses of Variance (MANOVAs) of the Essay Writing Factor Scores	70
	<u>Part II: Staff Study</u>	
	Differences Among the Markers and Between Departments on the Marking and Significant Features of Essays Written by Undergraduate Students Questionnaire (MSFQ)	96
6	SUMMARY AND CONCLUSIONS	112
	Limitations of the Present Enquiry	117
	Educational Implications	120
	ACKNOWLEDGEMENTS	122
	REFERENCES	123
APPENDIX A:	Sample Essay Writing Questionnaire (EWQ)	126
APPENDIX B:	Varimax rotated factor matrix for the 76 EWQ items	130
APPENDIX C:	Results of the remainder of factorised EWQ data multivariate analyses of variance	132
APPENDIX D:	Sample Marking and Significant Features of Essays Written by Undergraduate Students Questionnaire (MSFQ)	156

LIST OF TABLES

Table		Page
4.1	Classificatory Variables Used in the MANOVAs with Their Subgroups and the Number of Students in Each Subgroup	33
4.2	Factors Derived from the EWQ with Their Constituent Items and Possible Score Ranges	42
4.3	Intercorrelations among Factors I to X	44
5.1	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex Main Effect	71
5.2	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject Main Effect	72
5.3	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Age Main Effect	73
5.4	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex Main Effect	74
5.5	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject Main Effect	75
5.6	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Age Main Effect	76
5.7	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject Main Effect	77
5.8	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Age Main Effect	78

Table		Page
5.9	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status by Qualification Interaction Effect	79
5.10	Summary of Multivariate Analyses of Variance (MANOVAs): Main Effects, Interactions, Levels of Significance and Significant Dependent Variables for Sex, Subject, Status, Qualifications and Age	81
5.11	Status by Qualifications Interaction Effect: Subgroup Means for the Significant Dependent Variables Arranged According to Status and Qualifications	87
5.12	Status by Qualifications Interaction Effect: Significant Simple Effects Results for Each Dependent Variable with F Ratios and Levels of Significance	88
5.13	Frequency of Response per Category of Concern for Twenty 'Inappropriate' Essay Features	97
5.14	Frequency of Response per Category of Importance for Twenty 'Ideal' Essay Features	98
5.15	The Twenty 'Inappropriate' Essay Features Ranked According to Concern Felt by Education Staff and English Staff	99
5.16	The Twenty 'Ideal' Essay Features Ranked According to Their Importance as Perceived by Education Staff and English Staff	100
5.17	Responses of Education and English Markers to the Question 'What stands out most in your mind as i) indicating a good essay ii) indicating a poor/failing essay?'	108
B.1	Varimax Rotated Factor Matrix for the 76 EWQ Items	131
C.1	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Status by Age Interaction Effect	133

Table		Page
C.2	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Subject by Qualification by Age Interaction Effect	134
C.3	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject by Status by Qualification by Age Interaction Effect	135
C.4	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Status by Age Interaction Effect	136
C.5	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Status by Age Interaction Effect	137
C.6	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Age Interaction Effect	138
C.7	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Status Interaction Effect	139
C.8	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject by Qualification by Age Interaction Effect	140
C.9	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Qualification by Age Interaction Effect	141
C.10	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Subject by Qualification Interaction Effect	142
C.11	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status by Qualification by Age Interaction Effect	143

Table		Page
C.12	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject by Status by Qualification Interaction Effect	144
C.13	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Status by Age Interaction Effect	145
C.14	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Age Interaction Effect	146
C.15	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Status Interaction Effect	147
C.16	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Age Interaction Effect	148
C.17	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Status Interaction Effect	149
C.18	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject Interaction Effect	150
C.19	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Qualification by Age Interaction Effect	151
C.20	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject by Qualification Interaction Effect	152
C.21	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Qualification Interaction Effect	153

Table		Page
C.22	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status Main Effect	154
C.23	Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Qualification Main Effect	155

LIST OF FIGURES

Figure		Page
3.1	Elements of the Essay Writing/Marking Undertaking	16

ABSTRACT

Students are often criticised for their poor writing ability, though few studies appear to have been made of tertiary level writing skills. The present enquiry is an attempt to determine whether students at the tertiary level in two Arts departments differed in their adoption of various techniques when writing essays as part of their formal in-term coursework. Also the importance of various essay features required by markers in the same two departments is investigated.

Two studies were conducted. The principal study focussed on 276 undergraduate students in the Education and English Departments of the University of Canterbury who were enrolled for first- and third-year courses in 1978. Their responses to a 76 item Essay Writing Questionnaire were scored and factor analysed yielding ten substantially independent essay writing dimensions. Students' factor scores on these dimensions were tallied and used in a series of multivariate analyses of variance (MANOVAs) in order to determine whether students varying in sex, age, status, qualifications, subject taken and year at university significantly differed in their adherence to the procedures or attitudes represented by each of the essay writing dimensions.

An ancillary, but complementary, study was conducted which focussed on 12 staff members (six in each of the above departments) responsible for marking the essays of the students who participated in the main study. Their responses

to a nine question Marking and Significant Features of Essays Written by Undergraduate Students Questionnaire were analysed by comparing their comments. Emphasis was placed on their relative rankings of twenty positive ('ideal') and twenty negative ('inappropriate') essay features in order to determine the extent of agreement among the markers and between the departments regarding the importance of the essay features.

The first study revealed several significant differences on some of the essay writing dimensions between the groups of students in their factor scores. Males rated themselves higher than females on two factors, while females rated themselves higher than males on two factors. Students taking English rated themselves higher on one factor than the Education students, while the Education students rated themselves higher than the English students on three factors. Students aged 21 or over rated themselves higher than those aged 20 or below on five factors. A significant interaction effect showed that a more highly qualified group of part-time students rated themselves lower on four factors than a less highly qualified group of part-time students. Some reasons for these differences are discussed.

The second study indicated that staff in each department appeared to emphasise certain essay features more than others when compared to the other departments, although there was a reasonable measure of agreement among staff with respect to the importance of some essay features. Staff findings are used to inform the student study, particularly to assist interpretation of the differences

between Education and English students.

Finally some limitations and implications of the present investigation are discussed.

CHAPTER ONE

INTRODUCTION

The ability to write essays well is one of the determinants of academic success. In many university departments both graduate and undergraduate students are required to organise ideas pertinent to a specific topic into coherent and competently written forms. Thus, the acquisition of appropriate essay writing techniques becomes essential for students, particularly when essays are part of their coursework and contribute to their final assessment. Yet, since the art of essay writing is assumed to be part of a repertoire of advanced skills students bring to university from school, extensive instruction in essay writing skills is rare at the tertiary level in New Zealand.

Students are faced with a dilemma: realising that their essay writing performance could perhaps be improved by adopting better techniques, they may be unaware of the precise means available to them of effecting improvement. They may be unsure whether their essay writing practices are adequate and which, if any, need to be changed. On the other hand, since the precise expectations of their markers are often unknown to them, and may become clearer only as more essays are written, whether due to increasing familiarity with individual markers' techniques or as the result of continued practice and self-evaluation, students stand to gain or lose marks in a relatively haphazard

fashion. There is therefore a need for studies which attempt to describe current student essay writing techniques and to delineate those features of essays regarded by markers as acceptable or unacceptable. Clarification of these aspects of essay writing may provide students with knowledge which will assist the development of their essay writing skills.

* * *

Essays are used either as teaching/learning instruments or as a means of assessment, though with the increasing predominance of in-term assessment these distinct functions are becoming more blurred. At the University of Canterbury, for example, in 1976 essays were the second most frequently used means of assessment (i.e., after written tests) being used in 38% of 376 courses surveyed which practised formal in-term assessment. However, some departments relied more heavily on essays than others. In Bachelor of Arts courses, 61% used essays, the highest usage of essays in any degree course. In addition, the weighting for individual essays varied from as high as 80% in some cases to as low as 0% (E.R.A.U. Report, No. 42). Clearly, in both frequency and potential value in marks essays are an important component of university work requirements for a large number of students, especially those taking Arts courses. It is likely that essays are equally important in most universities. As Nimmo (1977, p. 183), discussing British universities, suggests, "the traditional type of essay, varying from perhaps 1500 words to the mini-dissertation, remains the staple of much undergraduate work."

The prevalence of coursework essays alone suggests that they are worthy of investigation. Further support, however, comes from the growing concern, particularly in the last decade, over certain aspects of the differential performance of students at university. While essays have been extensively studied as a means of assessment, particularly from the perspective of markers' reliability (see, for example, the important review by Coffman (1966)), there has been little emphasis on the essay writer. Yet, as there has been an expansion of research into teaching and learning in higher institutions, so there has been a growth of interest in the writing difficulties of students. The outcome of such concern is often the establishment of a remedial writing course which, either on an individual or group basis, provides a consultative service for students with writing problems. Such courses are run by many Australian universities and are very common in the United States (see, for example, E.R.A.U. Report, No. 19). In New Zealand such courses are comparatively rare, though Canterbury University has had one for the last three years.

Remedial writing courses often attempt to assist students with the English expression in their essays since, as an investigative study at the University of Adelaide concluded, for most students "the major problems arose in the writing of essays. These problems were both stylistic and mechanical in nature" (Hall and Neal, p. 31). Other courses, however, have a broader scope since, according to a report from the Australian National University, the problem is "not one of poor English so much as a poor

method, poor thinking, lack of confidence and an unawareness of what is demanded of a student in essay writing." (From Appendix II of E.R.A.U. Report No. 19, p. 9.) It is these broader areas which the present investigation is mainly concerned with, rather than English expression.

While students are inadequately prepared for essay writing in the university, it is likely that complaints about the abilities of undergraduates will continue to flare up from time to time. Students are perennially criticised for their apparent "illiteracy", secondary schools often receiving the major share of the blame. A recent newspaper report is typical of the kind of attention given to students' so-called "incompetence". It contained the heading, 'Many elite illerate' (Christchurch Star, 21-7-78), along with excerpts from the 1977 university bursary examiner's report which laments the poor writing skills of seventh form students. It is perhaps unfortunate that the only model of essay writing many students have upon entering university is likely to be that acquired in English classes at school; the techniques required to successfully handle tertiary level essays may be lacking in some students.

Writing is a complex cognitive activity; essay writing, as a specialised form of language manipulation, requires the mastery of diverse and appropriate skills. Even though, as Cockburn and Ross (1978, p. 4) state, "... success in essay writing is always to some degree dependent on literary ability", there are many skills associated with preparing for essays which are not 'stylistic and mechanical' in origin. Essays call upon a student's abilities to think, read and write. This entails,

for students, interpreting essay topics accurately, conducting relevant reading and note-taking, budgeting their time efficiently, organising their thoughts coherently as well as presenting the fruits of their reading and thinking in concise and accurate language. Due regard has to be paid to departmental conventions of presentation and style, while individual markers may have their own requirements which students are expected to fulfil.

Differences in staff preferences are likely to affect their essay evaluations: if students are aware of departmental or personal preferences of markers, attempts could be made to adopt appropriate techniques. Thus, the description of variations in essay requirements, which may reflect different subject emphases, is likely to assist students who are called upon to write essays in various departments. It is possible that, while there exist many essay writing skills, some may be regarded by markers in different departments as more essential for their discipline. Taylor (1978) suggests that students require opportunities "to develop the flexibility needed to attack differing kinds of academic discourse", (p. 3) as well as a "closer familiarity with the rhetorical strategies" (p. 8) of their respective disciplines. Students with essay writing problems which derive from differences in markers' expectations or demands require knowledge of such variations if their essays are to meet markers' standards.

Perhaps because of the apparent complexity of the skills required to write good essays, and the research emphasis on markers' criteria and inconsistency, few studies

have been made of the skills involved in essay writing. While Stalnaker (1951, p. 774) has commented that "abilities to organize, to write clearly, etc., cannot at this time be measured independently of the topic in which the writing centers", this should not deter investigations of at least the basic skills and techniques needed for effective essay writing. In view of the considerable practical implications for education of providing an adequate description and analysis of current student essay writing practices, which could possibly be used as a stepping-stone to further research orientated towards student improvement in writing, the lack of pertinent studies in writing skills at the tertiary level is surprising.

The present investigation is, consequently, an exploratory study which attempts to delineate the kinds of techniques and skills adopted by undergraduate students towards the writing of coursework essays at the tertiary level, and to determine whether there are any important differences in essay features perceived by markers as affecting the grades awarded to their students' essays.

* * *

The apparent lack of research directly concerned with the use of essay writing techniques and skills by students and the specific writing requirements of staff had important consequences for the nature of the approach adopted. Thus, a necessarily brief review of pertinent literature is followed by a chapter which outlines a model of the skills which are involved in essay writing, presents the assumptions on which the present investigation is based,

and provides an account of the questions underlying the studies conducted. The extent of the enquiry required two studies which, though separate, and not of equal status, were designed to complement each other in certain respects. The students and staff participating in the two studies were associated with the same university undergraduate courses, as essay writers and markers respectively.

In the first study, an attempt was made to investigate some of the techniques adopted by students when writing essays. An Essay Writing Questionnaire was constructed and administered to 276 undergraduate students in two different Arts departments. Their responses to the questionnaire were scored and factor analysed. Factor scores were obtained and used in a series of multivariate analyses of variance to determine the extent of differences among the students when compared according to their age, sex, status, qualifications, subjects taken, and year at university. The results were then analysed and discussed.

The second study was an attempt to delineate the views of essay markers concerning the differences between good and bad essays. Twelve staff, responsible for marking the essays of the students who participated in the first study, completed a Marking and Significant Features of Undergraduate Essays Questionnaire (MSFQ); their responses to questions in the MSFQ and their relative rankings of twenty positive and twenty negative essay features were analysed and discussed.

A final chapter attempts to draw together the findings from the student and staff studies, and discusses how the results from both studies inform each other. Some

implications and limitations of the present investigation are also discussed.

CHAPTER TWO

REVIEW

ESSAY WRITING/MARKING RESEARCH

There has been extensive research on essays as a means of assessment. While some of the findings from these studies may be relevant to the present investigation, it is important to bear in mind that the primary focus of assessment research is on essays as test or examination forms, not as formal submissions for in-term assessment, i.e., as part of normal coursework. There are important differences between the two types of essay, and it is unlikely that findings from research on essays as examination forms can be applied without reservation to the kinds of essays students are expected to write at the tertiary level.

Some of these differences are as follows. Essays studied as assessment forms are usually brief (i.e., up to 300 words), English compositions (see, for example, the studies conducted by Hartog and Rhodes (1936), Wiseman (1949) and Gosling (1966)) and written by school pupils as part of a national examination. Coursework essays, on the other hand, generally vary from approximately 1,000 to 2,500 words (see Cockburn and Ross (1978), p. 6, although they include both shorter and longer types of essay), may be written in any of several disciplines and tend to be expository, being written by university students to fulfil specific course requirements. Thus, the kind of essay

written by students participating in the present enquiry is longer and likely to be both more complex and more specific than the type of essay normally investigated by assessment researchers. As Coffman (1966, p. 284) suggests, "the essay prepared under the conditions of everyday life and the essay written under examination conditions are seldom equivalent products."

In addition, assessment research has concentrated on essay markers rather than on essay writers, in order to determine whether the ratings made by different markers on the same essays are consistent. It is generally agreed, however, that essay markers are unreliable, a finding which has often been replicated. According to Payne (1974, p. 142), even "recent research, employing highly sophisticated designs and analysis procedures, has failed to demonstrate consistently satisfactory agreement among essay graders." Whether analytic or impression methods of marking are used appears to make little difference, according to Hartog and Rhodes (1936). Errors in ratings can be of various kinds, due to differences in markers' standards, the tendency to distribute grades differently, even on the same marking scales, or differences in the relative values assigned to different papers (see, for example, Coffman (1966)). Although the present investigation is not concerned with marker unreliability, it would not be unreasonable to expect differences among essay markers at the tertiary level regarding the kinds of features emphasised in determining grades.

The application of varying criteria has been suggested as a source of differences in marks awarded to

the same essays by different markers. A study by Diederich, French and Carlton, reported by Coffman (1966), showed that markers could be grouped together depending on the relative emphases given to the ideas, form, flavour (i.e., style), mechanics or wording of particular essays. "Subgroups of readers who emphasised the same factors in rating the papers were less variable in their judgments than those from different subgroups" (p. 277). Marshall and Powers (1969) have shown that preservice teachers are influenced by extraneous factors (e.g., penmanship) when rating essays, even when content alone is supposed to contribute to their assessment. This is an example of the halo effect, i.e., the tendency to overlook specific essay features due to the operation of some kind of general impression. In addition, Fostvedt (1965) has shown, for example, that while markers might agree that certain criteria are important when evaluating English compositions, "there is no evidence of consistency in the employment of such criteria" (p. 111). Similar effects could partly determine the grades assigned by tertiary level markers; in any case, there is a possibility that varying degrees of importance would be attached to the same essay features, and that markers could be broadly categorised according to their marking characteristics.

Even when the rather more complex nature of tertiary level expository essays, compared to 'test' essays, is taken into account, the foregoing observations seem likely to apply. However, there are no research findings in this area. Logically, given that high school markers tend to

interpret the features of particular essays in different ways, it would seem that markers from university departments are likely to share various emphases while differing in giving more, or less, weight to others. The precise nature of such differences, however, cannot be predicted since there is little indication from other studies on interdepartmental assessment criteria.

Nimmo (1977) suggests that the essay marking criteria of academics normally remain implicit, but that such criteria need to be described in order to indicate to students what are considered to be desirable and undesirable characteristics of written work. While there appears to be a lack of empirical research in this area as well, there exists a reasonably comprehensive body of work on the writing of assignments or reports which discusses, and often prescribes, the qualities of good writing at the tertiary level. (See, for example, Barzun and Graff (1957); Anderson, Durston and Poole (1970); Leggett, Mead and Charvat (1978).) However, although such works contain a great deal of advice on writing, some of which relates directly to essays, they do not present findings on students' writing skills. 'Manuals of good writing', nevertheless, embody features of written work which could well be regarded by essay markers as desirable.

There have been calls for research on students' writing techniques from Taylor (1978), who is concerned more with language skills, and Nimmo (1977) who entitles his article 'The Undergraduate Essay: A Case of Neglect'. He argues that essays have been disregarded by researchers

investigating teaching and learning in higher education partly because essays, as "an integral part of the fabric of higher education... are easily taken for granted" (p. 185). He further suggests that,

"essay weaknesses come in many forms; and ... the more serious they are, the earlier they occur in the intellectual process of essay-writing. Thus failure to cite appropriate evidence is almost a matter of cosmetics - a last-minute thing - but irrelevance or illogical argument set in much earlier down the line; and the most damaging error of all is failure to understand the meaning of the question itself" (p. 186).

While the present enquiry could not discover all the types and magnitudes of errors implied by Nimmo's statement, an attempt will be made to outline markers' views regarding the seriousness of specific errors, and to indicate variations in the application of specific essay writing techniques adopted by undergraduate students.

CHAPTER THREE

A MODEL FOR ESSAY WRITING RESEARCH

The apparent paucity of research related to the present investigation on students' writing skills has several important consequences for the approach adopted. To begin with, it is necessary to provide a brief theoretical discussion of a possible means for undertaking essay research which is based on more than common-sense. Consequently, it is proposed in this section to develop a simple 'model' of the variables involved in essay writing and its evaluation at the tertiary level. The aim of the model is to illustrate some of the issues associated with essay writing which are worthy of investigation. Thus, following its presentation there is an account of the major assumptions underlying the present enquiry, and the specific questions it is designed to investigate.

It is not claimed that the model represents a comprehensive research framework; rather, it is used in an attempt to draw out the research implications of a particular approach to the investigation of essay writing skills at the tertiary level. While there may well be alternative views on how the various aspects of essay writing are interrelated, the interpretation offered is designed to stand largely on its own merits. As an attempt to place the present investigation within some kind of logical framework its role is suggestive rather than definitive.

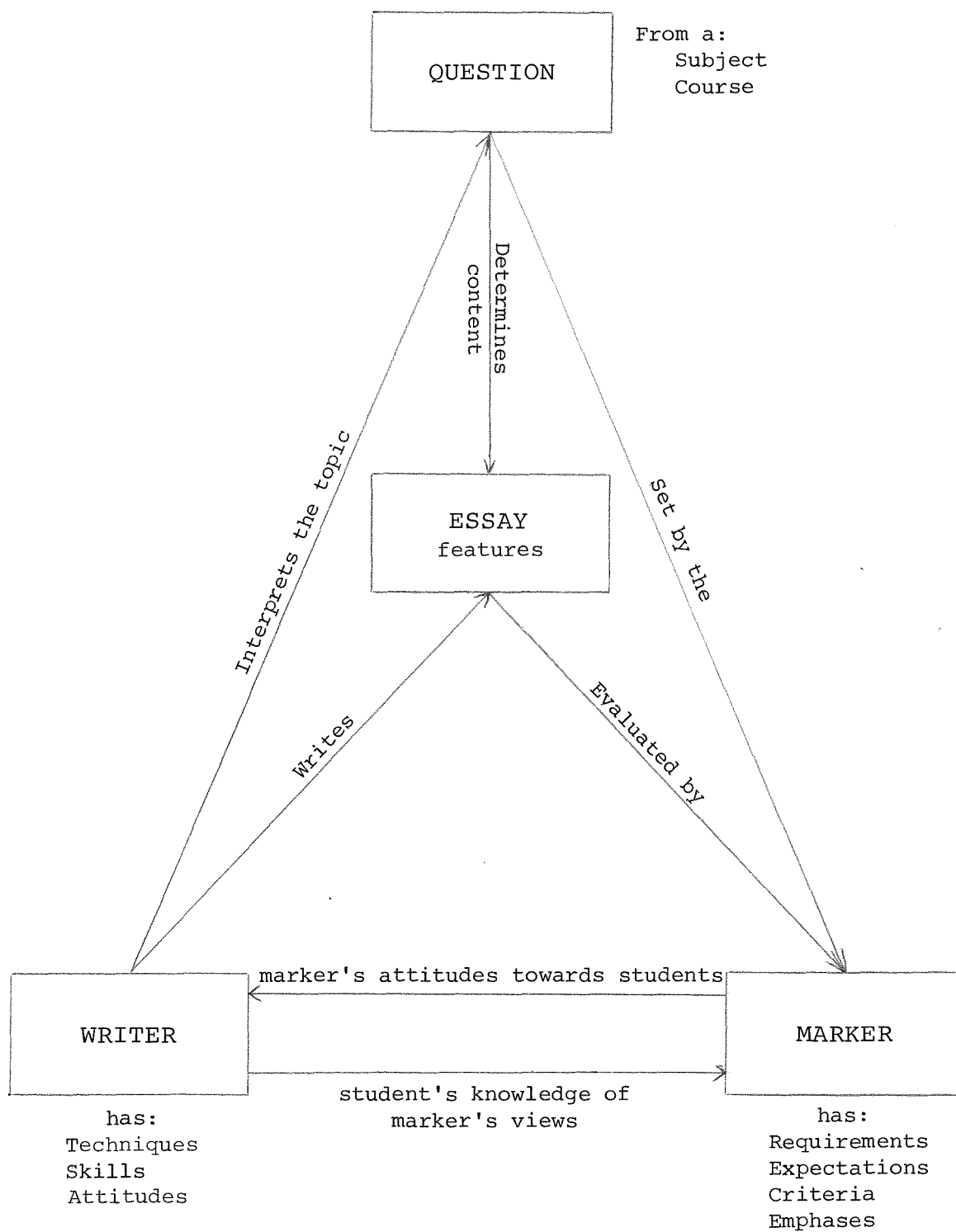
THE ESSAY WRITING MODEL

1. Elements of the model

In simple terms, the university essay writing undertaking can be viewed as a unified process which consists of an interaction among four elements: the essay writer, the essay marker, the essay topic, and the essay itself. Figure 3.1 illustrates some of the interconnections of these components. For the purposes of the present enquiry, the essay writer is the undergraduate student who is required to write essays as part of his normal coursework; the essay marker is the staff member responsible for the marking of the student's work. The skills required in order to write essays, and the kinds of features markers use as the basis for essay evaluation, are discussed in more detail in sections two and three of this chapter.

The essay question is derived from a particular subject area or discipline being studied by the writer and taught by the staff member. It provides a stimulus for the student's thought within a specified area. It is possible that different disciplines tend to use different types of essay questions, the key words of a question acting as a signal for a specific kind of structure required in the student's answer. (See, for example, H.E.R.O. Report, March 1979, pp. 6-31.) If students fail to interpret the implications of a key word in an essay question correctly, it is possible that the grades awarded will be considerably lower. Further, different subject areas could well require different approaches by the students to the use of particular essay skills.

Figure 3.1

Elements of the Essay Writing/Marking Undertaking

Finally, the essay itself is an embodiment of the student's thinking in response to the essay question. The form of the essay will be determined by the student's use of different techniques or skills, while the use of such skills will be discerned by the marker as essay features.

From the research perspective, it would be possible to focus on any one of the four elements, but in practice it is perhaps more productive to consider the elements in relation to each other. Thus a student required to write an essay has to have mastered, as a reasonable minimum, certain aspects of essay writing: he needs to be able to interpret the question accurately (and supply appropriate subject-matter or content), to adopt appropriate techniques (such as sound planning and coherent organisation), to be aware of the marker's expectations and requirements regarding the desired level of performance in handling the question, and to put his understanding into a satisfactory written form. In the present enquiry, the main foci are techniques adopted by students in writing essays, and features assessed by markers when evaluating essays. No account has been taken of different kinds of essay question and their effects on student writing practices, nor have various linguistic indices (see, for example, Poole (1976)) used to describe and analyse individual essays been considered. Instead, essay writers, i.e., undergraduate students in two Arts departments, and essay markers, i.e., staff members in the same two departments, are investigated in terms of the skills adopted by students and the features required by markers.

2. Skills associated with essay writing

Essay writers vary in both their performance and capabilities. Some students attain a high level of performance in essay writing, while others consistently perform badly. Each student is likely to have acquired a range of skills or techniques which are used in essay writing, but some employ their skills more productively. One of the aims of the present investigation is to distinguish sound essay writing techniques from unsound ones, and to establish whether certain groups of students differ from other groups in the employment of specific skills. The nature and extent of feedback obtained by the student from the marker may determine whether the student improves his performance; alternatively, knowledge of 'good' as distinct from 'bad' techniques may assist improvement. In addition, the student's commitment (interest, aims and motivation) to the essay writing task may affect his level of achievement.

What, then, are some of the essay techniques or skills which might differentiate students? In broad terms, it is possible to distinguish several types of skill which appear to be associated with essay writing, e.g., logical skills, linguistic skills, planning skills and presentation skills. Bloom's (1956) discussion, for example, of "skill in writing, using an excellent organisation of ideas and statements" (an example of the fifth level of the taxonomy of educational objectives in the cognitive domain) is an indication of the importance of logical skills in essay writing. This level, labelled 'synthesis', suggests "the

putting together of elements and parts so as to form a whole. This is a process of working with elements, parts, etc., and combining them in such a way as to constitute a pattern or structure not clearly there before" (p. 162). Clearly, the ability to organise ideas in relation to one another is one of the important skills involved in essay writing. But effective organisation is dependent on correct interpretation of the purpose or nature of a problem, as well as the nature of important elements and their inter-relations. These activities require judgements about the usefulness of material, and an ability to handle ideas in a coherent fashion. Further, the essay writer needs to introduce structural clues for would-be markers which, according to Palmer (1961), are "the over-all pattern of an essay, ... the order of development of the ideas ... [and] various cues which indicate what point the discussion has reached" (p. 200). These 'clues' appear to involve the use of logical skills.

In terms of their broad structural characteristics, essays can be viewed as tripartite structures, i.e., containing an introduction (or beginning), a development (or middle) and a conclusion (or end). This simple 'spatial' view implies a function for each part, which is set out in 'A Guide to the Writing of Essays' produced by the English department of the University of Canterbury.

"An essay should have a beginning, a middle and an end.... The beginning should outline what you intend to do in the essay. The middle contains the evidence on which you base your opinions, together with your argument. The end is a summary of the argument, a modified restatement of it, and should not

introduce new material. The reader should be able to see from the beginning what you are aiming at, and the end should convince him that you knew in the beginning exactly what direction your argument would take" (p. 3).

Adherence to such a scheme could well represent the use of logical skills involving essay techniques which are differentially adopted by students.

Linguistic skills are important for effective essay writing. Students who do not express themselves in adequate English may well be candidates for eventual failure. Thus spelling correctly, using accurate grammar and appropriate punctuation, and checking essays for errors of a 'mechanical' type, may involve specific skills which students need to have acquired in order to put their ideas into an appropriate form. Poor grammar and punctuation may create ambiguities and confuse sense. An indication of the importance of linguistic skills is Taylor's (1978) comment that

"the language deviations of undergraduates... are as fit a subject for disciplined study as any other apparently significant upset in nature or in human behaviour... [as] they constitute an invaluable and irreplaceable source of data on how students learn and how they cope with the difficulties of understanding their work..." (p. 10).

While the present enquiry is not concerned with 'language deviations' it is, in general terms, concerned with the emphasis placed on language errors by different markers and departments.

Another important group of essay writing skills are those concerned with planning various stages of essay writing, i.e., the ability to follow a series of procedures

without omitting any essential steps. The essay writing undertaking can be viewed as requiring initial planning, relevant reading, taking notes, ordering the notes and ideas, making a rough draft, writing a final draft, revising, and so on. How a student budgets his time could well affect eventual success. Omitting any of the stages could result in a poorer essay than would have been the case otherwise. It is likely, however, that each stage of the 'planning' sequence involves various combinations of skills such as logical skills, for example, when notes for a specific essay topic are being organised.

Further essay writing techniques might entail following departmental conventions with regard to word length, layout of page, bibliographic and footnote references, etc. Skills of this kind could be called 'presentation' skills.

Skills associated with essay writing could be divided into groups, depending on their complexity. Thus basic skills could consist of budgeting essay writing tasks (e.g., allowing time for each stage of preparation or writing), correct expression (i.e., accurate punctuation, grammar and spelling), orderliness (e.g., legibility, setting out, general presentation) and adherence to conventions, such as correct referencing. On the other hand, interpreting the essay question, including appropriate content, the actual structure of the essay, and style (e.g., fluency, a sense of flow), appear to be more complex. Cognitive operations, such as determining the relevance of a particular piece of information, may well figure strongly in the development of

essay writing techniques and skills. It is possible that students can be differentiated according to the extent to which they adopt sound or unsound essay writing approaches with regard to both basic and more complex skills of these types.

3. Essay features

If the assumption that essay writing can be interpreted as a composite of appropriate skills is accepted, a natural corollary is that the ideal essay writer adheres to particular skills closely approximating markers' views of desirable essay features. For the purposes of the present enquiry, therefore, essay features are considered to be evidence of the use of particular essay writing techniques or skills. From the writer's point of view an essay can be interpreted as an embodiment of certain skills, while for the marker an essay consists of a series of specific features.

Markers, however, may have varying standards depending on the importance attached to different essay features. Their perceptions of the students' levels of performance, their interpretation of the essay question and views of appropriate content, their requirements regarding appropriate essay features and consistency in the application of criteria are likely to affect their award of grades. Also, it is possible that markers in different departments tend to value certain essay features more than others. However, the following features of essays are used in the staff study as a basis for determining the nature and extent of differences among markers in the two departments

selected.

A good expository essay at the tertiary level is considered to be based on sufficient reading connected with the essay topic and adherence to a particular stance on the problem involved. Preferably it contains material considered important by the intended audience (i.e., usually, but not necessarily, a marker known to the student) as well as some of the student writer's own ideas. It has a clear structure with a discernible introduction, where the author clearly states his intentions, logical steps in the overall argument with smooth transitions between paragraphs and one major idea in each paragraph, and a fitting conclusion with a punchline or observation of interest. The writer uses sound reasoning, defines important terms from the question, writes consistently on the topic, and presents appropriately detailed evidence for controversial statements. Stylistically, there is a clear style of writing with concise expression and a sense of flow unimpeded by mechanical errors or faulty grammar.

Essays with sufficient features antithetical to those above could be considered poor or unsatisfactory in terms of the 'ideal' essay's features. Such aspects could well include, for example, inadequate reasoning or obscure meaning, poorly connected or rambling paragraphs, confused interpretation of the topic set, and spelling or grammatical errors.

*

*

*

*

Just as students may differ in the frequency with which they adhere to specific essay writing techniques, so markers (i.e., staff members) may differ in the emphasis they give to different essay features. It is the purpose of the essay writing model described above to suggest where some of these differences could lie. Thus some groups of students may adopt, for example, various planning or logical skills more, or less, often than other groups of students. On the other hand, the extent to which staff require specific essay features or regard particular features as appropriate or inappropriate may well vary from marker to marker, or from department to department. It remains to establish the principal assumptions underlying the studies conducted as part of the present enquiry, and to describe the research questions.

ASSUMPTIONS UNDERLYING THE STUDENT AND STAFF STUDIES

Firstly, given the lack of pertinent studies on both students' writing skills and the kinds of features in essays which assist markers in determining their grades, an exploratory two-part investigation was regarded as more appropriate than a confirmatory one for the present enquiry. Thus, no formal hypotheses are presented which it is the aim of the studies to confirm or disconfirm. Instead, an attempt is made to analyse both student and staff data which bears on specific research questions related to essay writing and marking. This approach had several important consequences. To begin with, the studies in the present enquiry are not of equal status. The student data has been

analysed in a more sophisticated manner than the staff data. If practical circumstances had permitted, the staff data would have been analysed at a similar level of sophistication. However, decisions were made which had the effect of subordinating the staff study to the student study. This limitation must be borne in mind when the results of the present investigation are interpreted. Nevertheless, it was still considered worthwhile to include the staff findings since they assist in interpreting the student results and provide an indication of interdepartmental variations which may affect current student essay writing practices.

Secondly, it is assumed that the most appropriate method for delineating students' essay writing practices is to obtain their responses to a questionnaire listing a large number of essay writing techniques which, by and large, students are assumed to share. Although there is a danger that students are unable to honestly assess their own behaviour, this was not considered a serious problem. Student evaluations of their own essay writing practices are prerequisites for the analysis of current ranges of student performance in essay writing. In any case, the student questionnaire included items which could test for consistency of response.

Thirdly, it is assumed that effective essay writing depends on the use of appropriate skills and techniques which, together, create an acceptable answer in an acceptable form. The previous section has delineated some of the skills which are likely to be used in essay writing.

It is possible that certain essay writing skills are very complex, perhaps consisting of several sub-skills, and that various skills depend on the effective use of other skills or techniques. However, the present investigation focusses on skills which appear to be readily identifiable. While essays can be seen as integrated wholes, combining diverse skills in a closely-knit unit, they can also be viewed either as accumulations of largely specifiable and learnable techniques which students have differentially acquired, or as combinations of several features which, in spite of the tendency of essay markers to judge essays impressionistically, can be treated individually and meaningfully.

Fourthly, it is assumed that essay features discerned by markers reflect the use of specific essay writing skills by students, and that comparisons between staff attitudes (towards their students' performance) and students' perceptions of their own performance are useful. It is important to bear in mind the over-riding aim of the present enquiry, i.e., to gather information on essay writing/marking practices which can be used eventually to assist students' improvement at the tertiary level.

Fifthly, it is assumed that interdepartmental comparisons using the same essay features are a valid means of establishing whether different departments emphasise different requirements. While essay writing requirements may differ between departments it is unlikely that the differences will be so great as to render comparisons meaningless. Support for this view can be derived from the essay writing guides put out by the two departments

participating in the present enquiry. Both stress the need for understanding the topic, planning, appropriate use of evidence, correct attribution procedures, and so on, although the English guide gives more emphasis to syntax and style. One of the aims of the investigation was to determine whether departments had any significant differences in their respective requirements and, if so, to what extent certain essay features were preferred to others.

Finally, it is assumed that comparing the responses of markers to specific essay assessing questions will yield useful information on current assessment criteria. It is possible that some staff members would inaccurately delineate their marking practices. It is also possible that criteria used when making an actual assessment of an essay and those listed 'consciously' in response to a questionnaire would differ; however, it would be very difficult to avoid an element of self-justification, in any case, with data of this kind due to the subjective nature of essay assessments, and the nature of the questions asked.

THE RESEARCH QUESTIONS

The present investigation was designed as a two-stage enquiry, with a principal part, and an additional, though secondary part designed to complement the major study. Essay writers (i.e., undergraduate students) were questioned as to the frequency with which they adopted various essay writing procedures; secondly, essay markers (i.e., staff members) were questioned as to the kinds of features in essays they expected, and the differences they noted between

good and bad essays. Each stage of the enquiry was conducted independently. It was hoped that any important differences between student writing practices and staff marking practices respectively would be revealed, and that findings from the latter part would assist in interpreting the results from the major study. Accordingly, the description of current essay writing techniques of undergraduate students in two departments was attempted, as well as the delineation of current essay marking criteria adopted by the students' teachers. The student study was designed to provide data which could be used to answer specific questions related to differences among the students in their essay writing techniques. It was designed to answer the following questions:

1. do students differ in their essay writing techniques in any significant way?
2. how aware are students of departmental criteria regarding appropriate essay features?
3. is it possible to characterise a sound approach to essay writing and, conversely, an unsound approach?
4. are there identifiable essay writing dimensions and, if so, what are their underlying constructs?
5. are there significant differences in essay writing techniques among groups of students when compared by age, sex, subject taken (i.e., Education or English), qualifications held, status and year at university?

The secondary study (i.e., focussing on staff) was designed to answer these questions:

1. which essay features are regarded by staff as indicative of good essays and, conversely, of bad essays?
2. are there differences between departments in the criteria used to assess the merit of essays written by undergraduates?
3. are staff members concerned about different aspects of students' performance and, if so, what aspects concern them most?

CHAPTER FOUR

METHOD

PART I: STUDENT STUDY

INTRODUCTION

The written performance of undergraduate students is probably the most important factor in determining the degree of success they achieve at university. Students clearly vary in their writing abilities and their capacity to effect personal improvement in essay writing skills. However, awareness of their strengths and deficiencies in writing essays may assist some students in taking appropriate steps towards modifying inadequate or non-productive essay writing attitudes and practices. Improvement may depend not so much on improving one's style of writing ('inherent' qualities) but in perceiving the distinctions between sound and unsound approaches to essay writing, including departmental requirements, sensible planning and appropriate organisation of pertinent content.

The present investigation does not attempt to elucidate all the features which go to make up 'good' essay writing, but to delineate various dimensions of essay writing by focussing on the frequency with which undergraduate students adopt specific writing practices or hold particular views connected with writing essays.

These 'dimensions' are then used to compare distinct groups of students in order to determine whether they have significant differences in their approaches towards essay writing. The study is exploratory, rests on a series of assumptions about what constitutes fruitful approaches to the writing of essays and is concerned with student improvement in essay writing. The main focus is on student perceptions of their own performance in response to the Essay Writing Questionnaire.

SUBJECTS

The subjects were 276 undergraduate students enrolled at the University of Canterbury in 1978. Students from two departments participated in the study: 159 from Education, and 117 from English. Two considerations governed the choice of departments. Firstly, the main requirement was to include two subject areas which appeared to demand different kinds of essays from their respective students, both in content and presentation (i.e., essays on literary topics versus essays on historical, philosophical or psychological topics, with associated differences in approaches required). Secondly, and less important, the author had first-hand experience at all levels of both Education and English as a student and was able to approach staff members who were prepared to allow their students to participate in the study.

Students were chosen from two levels within each department, i.e., both first-year and third-year. Of the Education students, 127 were enrolled in the single first-year course available in the Education department, while

32 were enrolled as third-year students. All students enrolled in two third-year Education courses were selected. Of the English students, 91 were enrolled in a single first-year course. As there were several first-year courses available, a course was chosen in which the students had not been asked to fill in questionnaires previously, in case their responses to the Essay Writing Questionnaire were adversely affected. The 26 third-year students came from a single third-year English course. Two levels within each department were chosen as a precautionary measure, in order to obtain a reasonable number of students who were not in their first year.

There were further differences among the students. Not all were of the same status: 195 were full-time students, while 81 were part-time. Female students numbered 195, males 81. One hundred students held the equivalent of a bursary or higher qualification, while 176 had lower entry qualifications than bursary. Students ranged from their first to ninth year in attendance at university and, in age, from less than 20 years old to over 40 years. The main characteristics of the sample are presented in Table 4.1.

ESSAY WRITING QUESTIONNAIRE

The Essay Writing Questionnaire (EWQ) was designed to obtain descriptive data on the undergraduate students (e.g., sex, age, etc.) and to provide indications of both their attitudes towards various aspects of essay writing and their essay writing procedures. A copy of the EWQ is included in Appendix A.

Table 4.1

Classificatory Variables Used in the MANOVAs with Their
Subgroups and the Number of Students in Each Subgroup

<u>Variable</u>	<u>Subgroups</u>	<u>Number of students</u>
Sex (X)	Male	81
	Female	195
Subject (S)	Education	159
	English	117
Age (A)	20 years or younger	181
	21 years or older	95
Status (F)	Full-time	195
	Part-time	81
Qualifications (Q)	'B' bursary or higher	100
	Less than a 'B' bursary	176
Year at University	First	133
	Second or later	143

The first part of the EWQ required students to supply details on their year of attendance at university (i.e., whether they were in their first or subsequent year, etc.), their sex, subjects taken (i.e., Education or English, as well as other subjects), their status (i.e., whether they were full-time or part-time), entry qualification (i.e., whether they held a bursary or higher qualification, or less than a bursary) and age (i.e., 20 or below, 21 - 25, etc.). These were all classificatory or independent variables which were subsequently used as the basis for several group comparisons conducted later in the study.

The main part of the EWQ consisted of 76 items designed to provide an indication of each student's essay writing techniques and attitudes. Ratings were required of the frequency with which students performed a particular essay writing practice, or felt in a certain way about various aspects of essay writing, according to the following code: A (always), O (often, i.e., about three-quarters of the time), S (sometimes, i.e., about half the time), R (rarely, i.e., about one quarter of the time) or N (never). The questionnaire items were derived from the researcher's teaching experience, manuals containing advice on how to write, and discussions with university teachers who used essays as a major means of assessment in their courses. The initial selection of items was made on logical grounds alone, i.e., they were included if they appeared to fit specific essay writing features, under several headings, representing sound practices or attitudes involved in writing essays.

Items were included in the EWQ which seemed to belong to the following nine categories:

1. essay preparation before writing (including note-taking, planning and budgeting time):

e.g., item 34: 'I make detailed notes for each essay.'

item 20: 'Before writing I carefully organise the specific content of my essays.'

2. the rate at which students write, the impetus maintained throughout the task, the amount written and legibility:

e.g., item 14: 'I write out my essays quickly.'

item 35: 'I write my essays from beginning to end almost without a break.'

item 56: 'I try to write as much as possible in each essay.'

item 74: 'I have difficulty writing fast without making my handwriting untidy.'

3. ability to avoid distractions:

e.g., item 8: 'Personal problems affect my ability to write essays.'

item 3: 'I am easily distracted when writing essays.'

4. originality:

e.g., item 65: 'I am apprehensive about using original ideas in my essays.'

5. coherence and organisation:

e.g., item 67: 'I have difficulty keeping to one idea in long sentences.'

6. approach to the topic:

e.g., item 6: 'I have trouble deciding what constitutes relevant material for my essays.'

item 76: 'I have trouble working out the precise requirements of essay topics.'

7. proofreading:

e.g., item 25: 'I make sure I check my spelling before I hand in my essays.'

8. attitudes towards markers:

e.g., item 49: 'In this Department I think markers are too generous in their marking.'

9. attitudes towards writing essays in general:

e.g., item 12: 'I feel satisfied with my ability to write essays.'

In accordance with the model of essay writing skills presented and discussed in Chapter Three, items representing both basic and somewhat more complex skills or techniques were constructed. Thus numbers 1, 2, 3 and 7 are representative of basic skills, while numbers 4, 5 and 6 represent rather more complex skills associated with essay writing.

Items were of two main types. *Procedural* items attempted to tap the students' awareness of essay writing techniques, habits or practices and were largely descriptions of essay writing activities regarded as sound approaches, although some were expressed in a negative form, e.g., item 22, 'I tend not to read my completed essay through from beginning to end', or described an unsound approach,

e.g., item 26, 'I am inclined to waffle in my essays'. *Attitudinal* items attempted to tap the students' awareness of how they viewed particular essay writing activities. Item 6, 'I have trouble deciding what constitutes relevant material for my essays' is an example of an attitudinal item, as is item 19, 'I lack confidence in my essay writing ability' although this item represents a more global self-estimate than that implied by item 6.

In order to minimise possible response sets, items were randomly arranged and were phrased in both positive and negative forms. As checks on the students' consistency of response the same item was included occasionally in both its negative and positive forms, e.g., item 14, 'I write out my essays quickly', and item 21, 'I write essays slowly and painstakingly'. Alternatively, some items were included which were subsumed by others, e.g., item 11, 'I systematically check my essays for errors in spelling, punctuation and grammar' subsumes item 25, 'I make sure I check my spelling before I hand in my essays'.

The final questionnaire format was obtained after conducting a pilot study. Originally 80 items were included in the EWQ which was administered to a sample of 23 undergraduate students at the University of Canterbury. These students were enrolled in the first-year Education course in 1978 but were omitted from the main sample. Analyses were made of the distribution of responses to each item and comments which students had been invited to make after they had completed the EWQ's preliminary form. Certain items appeared to have ambiguities in their wording. Consequently, several poor items were omitted from the final EWQ,

especially those with severely skewed distributions and irremediable ambiguities, while a few extra items were included. The wording of several retained items was modified.

PROCEDURE

The undergraduate students participating in the EWQ completion were not randomly selected from the total population of University of Canterbury students, since one of the major aims of the present investigation was to determine whether there were any significant differences in approaches to essay writing by students in two different departments with presumed differences in writing requirements. Staff in Education and English were approached with a view to obtaining their co-operation with the administration of the EWQs. Although no-one approached refused, for various reasons it was more convenient for some courses to be included than others.

Copies of the EWQ were taken to participating courses in the last week of June, 1978. A brief announcement of the purpose of the study was made and the co-operation of the staff member concerned emphasised. Students were given approximately fifteen minutes to fill in the EWQ since, with the exception of first-year Education students, this was done during normal lecture time. The first-year Education students were given time in their tutorials to fill in the EWQ. Any missing students from each of the courses concerned were contacted where possible in order to minimise sampling bias due to non-attendance of students

at the time of administering the EWQ. As there was no need to know the name of the participants, the confidentiality of their responses was ensured and stressed to the students. Appropriate measures were taken to ensure that students who happened to be enrolled in more than one of the courses did not fill in the EWQ twice. Failure to complete the questionnaire items resulted in the exclusion of five students from the study.

Scoring the Essay Writing Questionnaire

Each of the 76 items in the EWQ with five choices of response was scored from one to five for each respondent. Items 2, 4, 7, 9, 11, 12, 15, 16, 17, 20, 24, 25, 27, 28, 30, 32, 33, 34, 41, 43, 48, 50, 53, 57, 58, 59, 63, 68, 71, 73, 75 were scored as follows: always - 5; often - 4; sometimes - 3; rarely - 2; never - 1. The remaining items, i.e., 1, 3, 5, 6, 8, 10, 13, 14, 18, 19, 21, 22, 23, 26, 29, 31, 35, 36, 37, 38, 39, 40, 42, 44, 45, 46, 47, 49, 51, 52, 54, 55, 56, 60, 61, 62, 64, 65, 66, 67, 69, 70, 72, 74 and 76 were scored exactly the reverse, i.e., always - 1, often - 2, etc. In each case high scores were assigned to responses regarded as indications of sound essay writing procedures or attitudes while, conversely, low scores were assigned to responses regarded as indications of unsound essay writing procedures or attitudes.

Factor analysis of the items from the Essay Writing Questionnaire

It is likely that the logical categories used as the basis for inclusion of items in the EWQ were highly subjective. Thus, in order to determine whether these

categories were acceptable it was necessary to obtain more objective evidence for clustering the items into categories. In addition, the pilot study was not extensive enough (because of practical limitations of time, for example) to reveal idiosyncratic items which failed to cluster in a meaningful way with other items. For these reasons, the EWQ items were factor analysed.

The factor analysis of the matrix of intercorrelations among the 76 items on the EWQ was conducted as follows. A standard principal components analysis preceded Kaiser's varimax procedure for rotation of a given number of factors. Eleven factors were extracted and rotated down to a limiting eigenvalue of 1.50. The limiting value of 1.50 was chosen in order to restrict the number of factors to be examined, since there were 23 factors with eigenvalues greater than 1.00. The factors extracted following the eleventh factor proved increasingly difficult to interpret sensibly and, of course, accounted individually for fairly trivial proportions of total variance. The eleven factors finally extracted accounted for 45.64% of the total variance. In the end it was decided also to eliminate Factor XI from subsequent analyses. It proved extremely difficult to interpret and accounted for only about 2% of the variance. The rotated factor matrix is given in Appendix B.

In the interests of providing reasonably clear and unambiguous factor definitions it was considered desirable to set reasonably rigorous standards for selecting those items defining each of the ten remaining factors. Sixty-nine out of the 76 items showed loadings of 0.30 or higher

on one or more of the ten factors, but quite a number of these had multiple or very modest loadings which posed serious interpretative problems. It was finally decided to exclude from the factor scores those items with loadings lower than 0.40. Items which satisfied this standard were also excluded if they had multiple loadings to a degree which rendered their interpretation ambiguous or confusing. Application of these standards resulted in the rejection of 28 items. Two further items were excluded because of scoring difficulties leaving a total of 46 items used for the definition of the ten extracted factors. Factor scores were obtained by summing scores on their constituent items.

Details of factor score composition are given in Table 4.2. Scores higher than the mid-point of each factor range indicate adoption of those procedures or attitudes, measured by each factor, more than 50% of the time, and represent positive adherence to the sound essay writing approaches indicated by the items constituting each factor. Conversely, scores lower than the mid-point of each factor range indicate adoption of those procedures or attitudes, measured by each factor, less than 50% of the time, and represent negative adherence to the sound essay writing approaches indicated by the items constituting each factor.

The ten factors derived from the 76 EWQ items are listed below, together with all defining items and interpretations. It will be noted that the items and accompanying loadings have been classified into four categories representing varying degrees of acceptability as defining items:

Table 4.2

Factors Derived from the EWQ with Their Constituent Items
and Possible Score Ranges

<u>Factor</u>	<u>Items</u>	<u>No. of items</u>	<u>Range of possible scores</u>
one	3, 8, 12, 19, 36, 37, 39, 44, 50, 63, 65, 76	12	12 - 60
two	10, 14, 29, 33, 34, 38	6	6 - 30
three	40, 42, 74	3	3 - 15
four	13, 26, 28, 46, 52, 55, 67, 69, 70	9	9 - 45
five	9, 15, 16, 24, 57	5	5 - 25
six	1, 56	2	2 - 10
seven	11, 22, 25	3	3 - 15
eight	61	1	1 - 5
nine	59, 71, 75	3	3 - 15
ten	51, 64	2	2 - 10

- A. Unequivocal loadings greater than 0.40.
- B. Loadings greater than 0.40 but having a smaller loading on another factor.
- C. Loadings between 0.30 and 0.39 with no significant loadings on other factors.
- D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors.

It needs to be emphasised at this point that only items in categories A and B have been used in the computation of the factor scores. These items also carry the main burden of the factor interpretations though reference to items in categories C and D is made when relevant and helpful. Factor loadings are given in parentheses preceding each item; where applicable loadings on other factors are indicated in parentheses after the items concerned.

It is also important to bear in mind that apparent anomalies in factor loadings largely stem from assumptions about the scoring of certain items which proved to be 'incorrect'. In such cases the interpretation was assisted by re-examining the original basis for scoring. Items 21 and 43 are examples falling into this category. Occasionally factor definition was assisted by taking into account correlations with other factors. These factor intercorrelations are given in Table 4.3.

Table 4.3

Intercorrelations* among Factors I to X (N = 276) (Decimal points omitted)

<u>Variable</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Factor 4</u>	<u>Factor 5</u>	<u>Factor 6</u>	<u>Factor 7</u>	<u>Factor 8</u>	<u>Factor 9</u>
Factor 1									
Factor 2	108								
Factor 3	161	033							
Factor 4	496	214	180						
Factor 5	112	365	-065	175					
Factor 6	084	-039	181	158	-070				
Factor 7	141	294	145	297	264	050			
Factor 8	224	008	-005	060	-015	051	020		
Factor 9	-063	157	-036	123	131	-017	161	-105	
Factor 10	089	066	184	239	044	041	077	041	137

* Significance levels: $r = 0.099$, $p < 0.05$ $r = 0.142$, $p < 0.01$ $r = 0.181$, $p < 0.001$

Factor I: CONFIDENCE

A. Unequivocal loadings greater than 0.40:

- 50. (0.63) I feel relaxed when I'm writing essays.
- 44. (0.61) I get stuck while writing essays.
- 37. (0.54) I'm uncertain about the precise
expectations of my markers.
- 8. (0.47) Personal problems affect my ability to
write essays.

B. Loadings greater than 0.40, but having a smaller
loading on another factor:

- 19. (0.72) I lack confidence in my essay writing
ability.
(0.35 on Factor IV)
- 12. (0.57) I feel satisfied with my ability to
write essays.
(0.35 on Factor IV)
- 36. (0.54) I find it difficult to begin writing.
(-0.32 on Factor VIII)
- 76. (0.49) I have trouble working out the precise
requirements of essay topics.
(0.36 on Factor IV)
- 63. (0.48) I can write for a long time without
feeling tired.
(-0.33 on Factor VIII)
- 39. (0.45) I think the skills I learned at school are
inadequate for writing university essays.
(-0.38 on Factor X)

65. (0.45) I am apprehensive about using original ideas in my essays.
(0.37 on Factor IV)
3. (0.44) I am easily distracted when writing essays.
(-0.31 on Factor VIII)
- C. Loadings between 0.30 and 0.39 with no significant loadings on other factors:
18. (0.31) I would like to have more time to write my essays.
- D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors:
6. (0.48) I have trouble deciding what constitutes relevant material for my essays.
(0.51 on Factor IV)
54. (0.39) In some parts of my essays I can't think of exactly the right words.
(0.38 on Factor IV; -0.38 on Factor VIII)
69. (0.34) I fail to make some points as clearly as I could in essays.
(0.46 on Factor IV)
2. (0.32) I understand why I receive the marks I do.
(0.34 on Factor IX; -0.35 on Factor X)
28. (0.30) I receive good grades for my essays (i.e., B or higher).
(0.54 on Factor IV)

This factor accounts for 12.16% of the variance. Interpretation seems reasonably straightforward; Factor 1 defines a dimension of certainty, control or confidence associated with the writing of essays. High scores on this

factor indicate a tendency towards lack of anxiety, and a sense of confidence and control over feelings of unease in approaching essay writing. Conversely, low scores indicate a tendency towards worry, uncertainty and feelings of inadequacy regarding essay writing.

Factor II: TIME

A. Unequivocal loadings greater than 0.40:

- 14. (0.71) I write out my essays quickly.
- 10. (0.70) I write my essays the night before they are due.
- 29. (0.69) I write my essays with little preparation.
- 33. (0.66) I allow myself plenty of time to write my essays.
- 21. (-0.62) I write essays slowly and painstakingly.
- 34. (0.58) I make detailed notes for each essay.
- 38. (0.56) I make notes for my essays roughly and quickly.

D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors:

- 35. (0.45) I write my essays from beginning to end almost without a break.
(0.45 on Factor VIII)
- 16. (0.41) I plan the general layout of my essays very carefully.
(-0.61 on Factor V)
- 20. (0.41) Before writing I carefully organise the specific content of my essays.
(-0.46 on Factor V)

4. (0.38) I timetable my essay preparation.

(-0.35 on Factor V)

This factor accounts for 7.95% of the variance. Interpretation again seems relatively straightforward; Factor II defines a dimension of budgeting time associated with the planning of essay writing. High scores on this factor indicate a tendency towards careful use of time in approaching essay writing, while low scores indicate poor budgeting of time. Item 21 requires comment. Initially the scoring of items 14 and 21 proceeded on the assumption that neither was a sound approach to writing essays, both representing extremes of a more balanced approach requiring neither undue haste nor excessive labouring. Hence both items were scored always - 1, often - 2, etc. However, as they are antithetical items it is clearly inconsistent to score them the same way. Thus the negative loading of item 21 indicates a tendency for those respondents scoring high on item 14 to score low on item 21. Had item 21 been scored always - 5, often - 4, etc., the scoring patterns would have been identical, a low score on item 14 being accompanied by a low score on item 21, a high score on item 14 being accompanied by a high score on item 21, etc. The two items have an intercorrelation of -0.55, indicating a reasonably strong relationship between them, but a negative one due to inconsistent scoring based on an 'incorrect' assumption. Consequently, though item 21 is a good defining item it was, because of its sign, omitted from the 'Factor II Score'.

Factor III: CARE

A. Unequivocal loadings greater than 0.40:

- 40. (-0.64) I find it difficult to write legibly.
- 74. (-0.64) I have difficulty writing fast without making my handwriting untidy.
- 42. (-0.53) I leave things out I'd like to include in my essays.

D. Loadings greater than 0.30 but having loadings on other factors:

- 75. (0.37) I keep thinking of new ideas about the material in my essays while I'm writing.
(0.54 on Factor IX)
- 67. (-0.31) I have difficulty keeping to one idea in long sentences.
(0.50 on Factor IV)
- 27. (0.31) I'm constantly looking back through my essay while writing it.
(0.38 on Factor VII)
- 32. (0.30) I change my mind about my essay's organisation while still writing it.
(0.37 on Factor VIII)

This factor accounts for 4.06% of the variance.

A first inspection of the items with unequivocal loadings on Factor III suggests that while items 40 and 74 are very similar, item 42 appears to be incompatible with a dimension of 'legibility'. A closer reading of the items, however, in association with those in group D, suggests that they define instead 'carefulness in writing' or 'the consequences of a

cautious approach when writing essays'. Thus items 40, 42, 67 and 74 define negative consequences of lack of caution or speed when writing essays, while the remaining items, admittedly with barely significant loadings on Factor III, suggest activities which require a careful approach, i.e., checking back through the essay, reviewing content, etc., which would not be facilitated by undue haste, as are illegibility and omissions. Thus, high scores on this factor indicate a tendency towards a cautious approach to writing essays, with legible writing and few important omissions of essay material, while low scores indicate the reverse tendencies, i.e., illegibility and omissions, compatible with a hasty approach towards essay writing.

Factor IV: ADEQUACY

A. Unequivocal loadings greater than 0.40:

- 26. (0.61) I am inclined to waffle in my essays.
- 70. (0.60) I find it difficult to avoid padding
my essays.
- 55. (0.52) The only content I use in my essays is
material taken from books or lecture notes.
- 46. (0.49) Simple grammatical errors occur
in my essays.
- 13. (0.42) I think some parts of my essays relate less
well to the essay questions than other parts
do.
- 52. (0.42) I tend not to define within my essay
important terms from the essay topic.

B. Loadings greater than 0.40, but having a smaller loading on another factor:

28. (0.54) I receive good grades for my essays
(i.e., B or higher).
(0.30 on Factor I).

67. (0.50) I have difficulty keeping to one idea
in long sentences.
(-0.31 on Factor III)

69. (0.46) I fail to make some points as clearly
as I could in essays.
(0.34 on Factor I)

C. Loading between 0.30 and 0.39 with no significant loading on another factor:

66. (0.36) I find the concluding paragraph of my
essays the most difficult to write.

D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors:

6. (0.51) I have trouble deciding what constitutes
relevant material for my essays.
(0.48 on Factor I)

54. (0.38) In some parts of my essays I can't think
of exactly the right words.
(0.39 on Factor I; -0.38 on Factor VIII)

60. (0.38) During the writing of my essays I have
difficulty remembering what I've just
written.
(-0.32 on Factor VIII)

65. (0.37) I am apprehensive about using original ideas in my essays.
(0.45 on Factor I)
76. (0.36) I have trouble working out the precise requirements of essay topics.
(0.49 on Factor I)
19. (0.35) I lack confidence in my essay writing ability.
(0.72 on Factor I)
22. (0.35) I tend not to read my completed essay through from beginning to end.
(0.62 on Factor VII)
12. (0.35) I feel satisfied with my ability to write essays.
(0.57 on Factor I)

This factor accounts for 3.74% of the variance. Interpretation offers little difficulty since Factor IV appears to define features of essays which are inappropriate for high grades. Item 28 was scored always - 5, often - 4, etc., unlike the remaining items (with the exception of item 12) which were scored always - 1, often - 2, etc. A tendency to receive high grades is clearly incompatible with the essay features listed in the other items loading on this factor, e.g., waffle, padding. High scores on Factor IV indicate a tendency towards avoiding those features of essays which could be construed as inadequacies, since they are likely to result in lower grades; low scores indicate a tendency towards the inclusion of the essay features which are incompatible with high grades.

This factor correlates quite highly ($r = +0.50$) with Factor I (see Table 4.3), with several items loading on both Factors I and IV. This is not surprising since the predominant emphasis of items loading on each of these factors is with aspects of essay writing which cause problems for students: Factor I suggests a tendency for feelings of inadequacy or uncertainty to be associated with essay writing, while Factor IV suggests actual procedures associated with essay writing which may lead to low grades and which, presumably, underlie feelings of inadequacy. However, the factors clearly exhibit differences in their underlying constructs. Factor I items are attitudinal, and are more concerned with global estimates of essay writing attitudes or capabilities, whereas Factor IV items are procedural, and describe kinds of errors or unsound features generally associated with poorer essays.

Factor V: ORGANISATION

A. Unequivocal loadings greater than 0.40:

- 9. (-0.74) I use headings and subheadings to help
with my essay preparation.
- 57. (-0.72) While writing I refer to my outline summary.
- 15. (-0.66) I rearrange my essay headings and
subheadings before writing my essays.
- 24. (-0.47) I tend to outline the content of each
paragraph before I start to write it.

B. Loading greater than 0.40, but having a smaller loading on another factor:

16. (-0.61) I plan the general layout of my essays
very carefully.
(0.41 on Factor II)
- C. Loadings between 0.30 and 0.39 with no significant
loadings on other factors:
72. (-0.36) While preparing my essays I retain the
main ideas in my mind rather than jotting
them down.
58. (-0.32) Comments on my essays make me change my
technique in later ones.
- D. Loadings greater than 0.30 but having loadings on
other factors:
20. (-0.46) Before writing I carefully organise the
specific content of my essays.
(0.41 on Factor II)
17. (-0.39) I question what I have written before
I hand it in.
(0.34 on Factor IX)
4. (-0.35) I timetable my essay preparation.
(0.38 on Factor II)
41. (-0.32) I consult a dictionary repeatedly
when writing essays.
(0.33 on Factor VII)
68. (-0.32) I juggle my material (notes, etc.) around
before I write.
(0.33 on Factor VIII)

This factor accounts for 3.29% of the variance.
Again there seems to be little difficulty with the
interpretation: the items on Factor V define 'essay

organisation'. High scores on this factor reflect a tendency towards careful essay organisation, while low scores reflect a tendency towards poor organisation of essays. Here, organisation refers to essay content, not time as indicated by Factor II. However, there is a modestly significant correlation between Factors V and II ($r = +0.37$; see Table 4.3), which possibly reflects the underlying notion of 'organisation' applicable to both factors.

Factor VI: AMOUNT

A. Unequivocal loadings greater than 0.40:

- 56. (0.60) I try to write as much as possible
in each essay.
- 1. (0.50) I have difficulty keeping to word limits
when writing essays.

This factor accounts for 2.80% of the variance.

Both items are consistent with a factor definition of 'amount of writing'. High scores on this factor indicate a tendency towards keeping to essay word limits; low scores a tendency towards not keeping to essay word limits.

Factor VII: CHECKING

A. Unequivocal loadings greater than 0.40:

- 25. (0.80) I make sure I check my spelling before
I hand in my essays.
- 11. (0.73) I systematically check my essays for errors
in spelling, punctuation and grammar.

B. Loading greater than 0.40, but with a smaller loading on another factor:

22. (0.62) I tend not to read my completed essay through from beginning to end.
(0.35 on Factor IV)

D. Loadings greater than 0.30 but having loadings on other factors:

27. (0.38) I'm constantly looking back through my essay while writing it.
(0.31 on Factor III)
41. (0.33) I consult a dictionary repeatedly when writing essays.
(-0.32 on Factor V)
73. (0.32) At intervals I count how many words I've written in my essays.
(-0.31 on Factor XI*)

This factor accounts for 2.69% of the variance. All six items define a broad dimension of 'proof-reading' or 'checking' and, except for item 73 which has the least significant loading on this factor, a more specific dimension of checking for errors, such as spelling mistakes. High scores on Factor VII reflect a tendency to examine essays for mistakes of a mechanical kind, while low scores reflect the reverse, i.e., a tendency to avoid checking essays for mechanical errors.

* Item 73 was the only item, loading on the ten extracted factors, which had an additional loading on Factor XI.

Factor VIII: FLOW

A. Unequivocal loadings greater than 0.40:

61. (-0.71) I write my essays in little spurts.

C. Loading between 0.30 and 0.39 with no significant loading on other factors:

53. (0.31) I vary my rate of writing within each essay.

D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors:

35. (0.45) I write my essays from beginning to end almost without a break.

(0.45 on Factor II)

54. (-0.38) In some parts of my essays I can't think of exactly the right words.

(0.39 on Factor I; 0.38 on Factor IV)

32. (0.37) I change my mind about my essay's organisation while still writing it.

(0.30 on Factor III)

68. (0.33) I juggle my material (notes, etc.) around before I write.

(-0.32 on Factor V)

63. (-0.33) I can write for a long time without feeling tired.

(0.48 on Factor I)

60. (-0.32) During the writing of my essays I have difficulty remembering what I've just written.

(0.38 on Factor IV)

36. (-0.32) I find it difficult to begin writing.

(0.54 on Factor I)

3. (-0.31) I am easily distracted when writing essays.
(0.44 on Factor I)

This factor accounts for 2.46% of the variance. Interpretation of this factor is not difficult, although as only one item has a strong loading on the factor its usefulness may be somewhat restricted. Factor VIII defines 'flow' or the fluency and smoothness with which essays are written. The items with barely significant loadings on Factor VIII indicate some of the inhibitors of 'flow', e.g., trying to think of an appropriate word (see item 54). High scores on this factor indicate a tendency towards ease of progression or fluency in writing, while low scores indicate a tendency towards a more erratic, less fluent approach to essay writing.

Factor IX: INVOLVEMENT

A. Unequivocal loadings greater than 0.40:

71. (0.57) When writing essays I keep asking myself
whether I'm answering the essay question.
59. (0.48) I keep checking the essay topic while
writing essays.

B. Loading greater than 0.40, but with a smaller loading on another factor:

75. (0.54) I keep thinking of new ideas about the
material in my essays while I'm writing.
(0.37 on Factor III)

C. Loadings between 0.30 and 0.39 with no significant loadings on other factors:

23. (-0.38) I begin writing my essays before I have collected all my notes.

30. (0.32) I reflect on my essays even while not writing them.

D. Loadings greater than 0.30 but having loadings on other factors or multiple loadings on several factors:

2. (0.34) I understand why I receive the marks I do.
(0.32 on Factor I; -0.35 on Factor X)

17. (0.34) I question what I have written before I hand it in.
(-0.39 on Factor V)

This factor accounts for 2.25% of the variance. Items on this factor appear to define a dimension of 'involvement with the question' associated with writing essays. The negative loading of item 23 can be interpreted as a result of inconsistent scoring since all items apart from 23 were scored always - 1, often - 2, etc., while item 23 was scored always - 5, often - 4, etc. The assumption made about the scoring of this item was that 'premature' writing was probably an unsound approach to essay composing; however, in view of its loading on the same factor as other items which define a dimension of interaction with the essay topic, this assumption was probably an incorrect one. Thus this result appears to suggest that essay writing prior to the collection of all relevant material is not necessarily an unsound practice, and may assist with topic interpretation. No mention is made in the item about whether the initial writing is subsequently modified in some way, in which case, on logical

grounds, the assumption of 'premature writing' which determined the original scoring is possibly more appropriately labelled 'exploratory writing', which is consistent with the underlying factor dimension of 'involvement with the question'. High scores on this factor therefore indicate a tendency towards a high degree of interaction with the essay topic and material which relates to the topic, while low scores indicate a tendency towards a lesser degree of thinking about or involvement with the essay question.

Factor X: MARKER

A. Unequivocal loadings greater than 0.40:

51. (-0.67) I think tutors are slipshod in their marking.

64. (-0.61) I think markers in this Department are too hard in their marking.

43. (0.45) I discuss my grades with a staff member.

C. Loading between 0.30 and 0.39 with no significant loading on other factors:

7. (0.30) I write my introduction after I have written the rest of my essay.

D. Loadings greater than 0.30 but having higher loadings on other factors or multiple loadings on several factors:

39. (-0.38) I think the skills I learned at school are inadequate for the writing of university essays.

(0.45 on Factor I)

2. (-0.35) I understand why I receive the marks I do.
(0.32 on Factor I; 0.34 on Factor IX)

This factor accounts for 2.16% of the variance. Apart from item 7, whose loading is only marginally significant in any case, this factor seems to be readily definable as representing a dimension of 'attitudes towards markers'. Item 43, however, with its positive loading on Factor X, unlike items 51 and 64, requires explanation. Item 43 was scored always - 5, often - 4, etc., while items 51 and 64 were scored always - 1, often - 2, etc., on the assumption that discussing one's grades with a staff member was likely to be a sound approach towards essay writing (in order to effect improvement, for example, by discussing problems with staff) but its positive loading suggests, conversely, that it is rather as aggrieved persons that students seek out staff members. Consequently, the original scoring was probably inconsistent. (See p. 39, where the factor scoring is discussed.) High scores on this factor indicate a tendency towards approval of the staff's essay marking, whereas low scores indicate a tendency towards disapproval of the staff's essay marking.

Although the items loading on Factor X appear to be interpretable as reflecting an underlying dimension of 'attitudes towards markers', the unexpected tendencies in responses to item 43 required that it be excluded from the Factor X score. However, although Factor X was retained in modified form, a new dependent variable, 'DISGRADE' (i.e., 'discussing grades' with a staff member), was included

which was simply item 43 entered as a separate factor. Subsequent analyses, however, showed that 'DISGRADE' was not a significant dependent variable in this study.

The ten factors appear to be relatively independent of each other, and to represent specific essay writing dimensions. Factors I and IV, however, have a reasonably high intercorrelation, although they differ in their underlying constructs. Similarly, Factors II and V share a modest relationship. By and large, however, the factor definitions and interpretations suggest that the procedures and attitudes involved in essay writing comprise a number of reasonably independent dimensions.

For each student, factor scores for all ten factors and DISGRADE were obtained by summing scores on appropriate individual items. These factor scores then became the dependent variables in the main statistical analysis which followed.

MAIN STATISTICAL ANALYSIS

Multivariate analyses of variance (MANOVAs) were used to examine the relationship between the classificatory and dependent variables (i.e., the ten factor scores and DISGRADE). In order to avoid empty cells it was necessary to dichotomise two of the classificatory variables - Age and Year and University. The other four classificatory variables - Sex, Subject, Status and Qualifications - were already in this form.

A number of exploratory* three-way MANOVAs were conducted in order to determine whether it was necessary to proceed with the analysis of all six classificatory variables. One of these - Year at University - failed to show significant main effects in any of these exploratory analyses, nor did it interact significantly with any of the other classificatory variables. This variable was therefore dropped from subsequent analyses. Unfortunately, because of the empty cells' problem, the remaining five variables could not be run together. For this reason several four-way MANOVAs were conducted using various permutations of the classificatory variables Sex, Age, Status, Subject and Qualifications.

Wilk's Lambda Criterion (likelihood ratio test) was adopted using Rao's approximate F distribution (Bock, 1975). The computer programme used was a revision of Bock's (1963) MANOVA programme developed at the University of North Carolina Psychometric Laboratory and held on disc at the University of Canterbury Computer Centre. Where the MANOVA main or interaction effects were significant, account was taken of the results of univariate analyses of variance and the correlations between dependent variable measures. Where appropriate, simple effects tests (Winer, 1972) were employed to examine the trends of significant interactions.

* These analyses have not been included either in the thesis itself or in the appendices. They are stored in the Education Department of the University of Canterbury and are available for inspection as required.

PART II: STAFF STUDY

INTRODUCTION

The written performance of undergraduate students is evaluated by staff members: the perceptions of staff marking the students' essays determine the grades awarded. The markers' criteria, whether implicit or explicit, general or specific, need to be clearly described so that students will know, to a reasonable degree of accuracy, what staff look for when they assess essays. The extent to which 'standards' are consistently applied (i.e., whether between departments or between markers within departments) and the degree of importance attached to particular essay features need to be specified in order to assist the development of student writing skills.

It is important to bear in mind, however, that this study is of secondary importance compared to the student study. It relies on the largely subjective impressions of a small sample of essay markers responsible for their own sets of essays; where appropriate their observations have been used to interpret findings from the student study.

SUBJECTS

Twelve staff members participated in the study. They were chosen because they had marked the essays of the students who participated in the student study. Consequently, there were six staff from each of the English and Education departments. The status of staff in each department varied due to different methods of conducting

tutorials and the associated responsibilities of essay marking. Of the English staff, five were lecturers whose tertiary teaching experience varied from two to over thirty years while one was a tutor who had had previous teaching experience at the secondary level. Of the Education staff, three were lecturers with varying lengths of teaching experience at the tertiary level (i.e., from one to ten years), while three were teaching fellows, i.e., part-time tutors appointed specifically to conduct tutorials and mark essays at the first-year level, who had, at most, one year's tertiary essay marking experience.

Although the staff members differed in several respects, it was not expected that this would invalidate any findings from the staff study. The enquiry was designed to establish whether markers of coursework essays had similar or different marking criteria, and to indicate the importance attached to specific essay features, both by comparing individual markers and two departments.

THE MARKING AND SIGNIFICANT FEATURES OF ESSAYS WRITTEN BY UNDERGRADUATE STUDENTS QUESTIONNAIRE

A questionnaire on the marking and significant features of essays written by undergraduate students was constructed. The main intention of the questionnaire was to gather material illustrating markers' perceptions of the differences between good and bad essays and to delineate those essay features assisting the determination of grades. Thus a series of open-ended questions was followed by two tables which markers were required to fill in indicating

their degree of concern about the presence of specific features typical of poor essays, and their view of the importance of a further set of essay features regarded as typical of good essays. A copy of the Marking and Significant Features of Essays Written by Undergraduate Students Questionnaire (MSFQ) is given in Appendix D.

The first part of the MSFQ contained seven questions. Staff were required to list what they considered to be the main functions of undergraduate essays in their courses; to specify the main features influencing their overall essay assessment; to indicate the amounts and types of correction made in essays, and the amounts and types of comments made; to list types of error resulting in deduction of marks and to indicate the severity of the deduction; to outline the most outstanding features of both good and bad essays; to show how much assistance they are prepared to give students with their essay writing and, finally, to indicate whether they considered first-year students were adequately prepared to cope with university writing demands. Each of these questions was designed to provide information for comparing individual markers and interdepartmental practices according to marking criteria, features distinguished in essays of varying quality, and improvements regarded as necessary in undergraduate essay writing.

The second part of the MSFQ required markers to complete two tables by ticking the column which most closely approximated their attitude towards each of the forty essay features contained in the tables. The items in each table were selected in accordance with the features outlined as part of the 'ideal' essay (see Chapter Three).

The first table comprised twenty features which are associated with poorer essays as either inappropriate or penalisable aspects. Each marker was required to indicate the degree of concern felt by the presence of each item when confronted in the students' essays. The levels of concern ranged from 'serious', through 'moderate' and 'mild' to 'none'. The second table listed twenty features commonly regarded as either essential components of good essays or as minimal requirements for acceptable essays. The markers were required to indicate the degree of importance they attached to each feature, according to whether they would penalise a student for failing to include the specified trait in an essay, on a scale ranging from 'demand' (i.e., that feature was demanded in a student's essay), to 'expect', 'prefer' and 'indifference'.

Together, the tables were designed to provide a partial measure of how 'prescriptive' each marker was, i.e., the importance attached to the presence or absence of a particular item was interpreted as an indication of the marker's view of what essays ought to contain or to avoid. Thus the first table, with its list of 'negative' essay features, illustrates the marker's perceptions of what essays ought not to include, while the second table, with its list of 'positive' essay features, exemplifies traits which markers consider ought to be in essays. The tables, however, do not necessarily reflect the severity of individual markers' assessments; rather, they provide descriptions of the relative weighting of specific essay features for the essay markers, both within and between departments.

PROCEDURE

The MSFQ was delivered to staff members after the completion of the 1978 academic year. It was filled in in their own time and returned to the author. Each of the twelve markers completed the MSFQ without omissions. Some markers, however, provided more detailed answers than others.

Analysis of responses to the MSFQ

The following procedure was adopted with the MSFQ comments. For each question, responses were compared from marker to marker and recurrent concepts noted. These served as the basis for categories to which each response was assigned. Although the method used was comparatively unsophisticated, it was deemed appropriate given the nature of the staff comments, which were often brief. The range of answers to each question was noted. Where possible, responses were tabulated; alternatively, a more discursive treatment was used.

The two tables from the MSFQ were analysed in a different manner. Responses to each feature, by column, were added. Using a simple system of weighting, which entailed giving responses in the columns 'serious concern' and 'demand' a value of three, those under 'moderate concern' and 'expect' a value of two, those under 'mild concern' and 'prefer' a weighting of one and disregarding for this purpose responses under 'no concern' and 'indifferent', it was possible to determine the relative ordering of the features listed in each table. Thus, the higher the score for any feature, the greater the degree of concern for items in table one, and the more importance

attached to an item as a desirable essay feature in table two. In addition, by adding the number of responses in each column per marker and applying the same weighting, a score could be derived for each marker; markers could then be ranked according to their scores on either table or the two tables combined, or departmental averages determined.

* * *

Where appropriate, findings from the staff data are used to illuminate the student data. It is possible that students in different departments perceived the requirements of their markers differently, with consequent effects on their approaches to essay writing, and that variations in essay writing procedures and attitudes can be meaningfully interpreted in light of the varying criteria and expectations of staff members in different departments. Thus, for example, if the emphases of Education staff when assessing essays contrast in some respects with those of English staff, it is likely that significant differences between students in the two departments on various essay writing dimensions can be partially explained as a result of their awareness of these emphases.

CHAPTER FIVE

RESULTS AND DISCUSSION

PART I: STUDENT STUDY

MULTIVARIATE ANALYSES OF VARIANCE (MANOVAs) OF THE ESSAY WRITING FACTOR SCORES

The classificatory variables, Sex (male versus female), Subject (Education versus English), Status (full-time versus part-time), Age (20 years or younger versus 21 years or older) and Qualifications (bursary or higher versus non-bursary) were used in a series of multivariate analyses of variance (MANOVAs). The dependent variables in each multivariate analysis of variance were the scores for each of the ten extracted factors CONFIDENCE, TIME, CARE, ADEQUACY, ORGANISATION, AMOUNT, CHECKING, FLOW, INVOLVEMENT and MARKER.

The series of MANOVAs conducted, involving four-way comparisons of the classificatory variables, Sex, Subject, Status, Age and Qualifications, yielded several main effects and one significant two-way interaction effect. The significant results are presented in Tables 5.1 to 5.9. Non-significant interactions and main effects are contained in Appendix C. When consistently non-significant results were obtained from recurring combinations of variables, these have been presented once only.

Table 5.1

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex Main Effect

Test of roots 1 through 1	F 3.21	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.35
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	10.85	572.32	0.001	-0.79	
Factor 2	0.78	17.78	0.379	0.05	
Factor 3	5.94	41.27	0.016	0.52	
Factor 4	0.07	1.75	0.791	0.22	
Factor 5	1.99	39.53	0.160	0.30	
Factor 6	0.35	1.06	0.555	-0.15	
Factor 7	1.61	16.55	0.206	0.12	
Factor 8	6.28	7.48	0.013	-0.26	
Factor 9	2.10	7.65	0.148	0.06	
Factor 10	3.65	10.55	0.057	0.26	
Disgrade	1.10	1.00	0.295	-0.19	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.2

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject Main Effect

Test of roots 1 through 1	F 3.29	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.36
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.46	77.06	0.228	-0.16	
Factor 2	9.15	209.71	0.003	0.68	
Factor 3	0.65	4.54	0.420	0.18	
Factor 4	4.89	122.20	0.028	-0.59	
Factor 5	0.04	0.74	0.848	0.02	
Factor 6	0.17	0.51	0.684	0.11	
Factor 7	0.04	0.39	0.846	0.01	
Factor 8	4.05	4.83	0.045	0.32	
Factor 9	2.04	7.42	0.154	-0.27	
Factor 10	5.51	15.90	0.020	0.42	
Disgrade	1.95	1.77	0.164	-0.29	

* Canonical correlation between artificial ANOVA variables and criteria

Table 5.3

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Age Main Effect

Test of roots 1 through 1	F 3.54	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.37
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.83	96.19	0.178	-0.19	
Factor 2	2.73	62.62	0.100	-0.04	
Factor 3	0.18	1.22	0.676	-0.28	
Factor 4	13.71	342.65	0.001	0.44	
Factor 5	4.41	87.71	0.037	0.14	
Factor 6	6.83	20.85	0.010	0.35	
Factor 7	19.26	198.38	0.001	0.56	
Factor 8	5.42	6.46	0.021	0.30	
Factor 9	0.06	0.20	0.815	-0.14	
Factor 10	2.91	8.39	0.089	0.16	
Disgrade	2.15	1.95	0.144	0.17	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.4

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex Main Effect

Test of roots 1 through 1	F 3.23	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.35
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	10.40	572.32	0.001	-0.82	
Factor 2	0.78	17.78	0.377	0.04	
Factor 3	5.82	41.27	0.017	0.51	
Factor 4	0.06	1.75	0.800	0.26	
Factor 5	1.99	39.53	0.160	0.29	
Factor 6	0.35	1.06	0.555	-0.16	
Factor 7	1.65	16.55	0.200	0.13	
Factor 8	6.17	7.48	0.014	-0.28	
Factor 9	2.11	7.65	0.148	0.06	
Factor 10	3.73	10.55	0.055	0.26	
Disgrade	1.09	1.00	0.297	-0.17	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.5

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject Main Effect

Test of roots 1 through 1	F 3.24	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.35
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.40	77.06	0.238	-0.17	
Factor 2	9.24	209.71	0.003	0.69	
Factor 3	0.64	4.54	0.424	0.14	
Factor 4	4.50	122.20	0.035	-0.54	
Factor 5	0.04	0.74	0.848	-0.01	
Factor 6	0.17	0.51	0.684	0.12	
Factor 7	0.04	0.39	0.843	0.02	
Factor 8	3.98	4.83	0.047	0.32	
Factor 9	2.04	7.42	0.154	-0.30	
Factor 10	5.62	15.90	0.018	0.43	
Disgrade	1.94	1.77	0.165	-0.27	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.6

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to
Sex, Subject, Qualification and Age: Age Main Effect

Test of roots 1 through 1	F 3.33	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.36
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.27	14.75	0.605	-0.27	
Factor 2	1.91	43.32	0.168	-0.03	
Factor 3	0.91	6.43	0.342	-0.36	
Factor 4	6.71	182.24	0.010	0.30	
Factor 5	4.19	83.21	0.042	0.18	
Factor 6	8.17	24.86	0.005	0.44	
Factor 7	14.58	146.00	0.001	0.55	
Factor 8	5.09	6.17	0.025	0.32	
Factor 9	0.13	0.46	0.723	-0.20	
Factor 10	3.66	10.35	0.057	0.28	
Disgrade	1.53	1.39	0.217	0.14	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.7

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject Main Effect

Test of roots 1 through 1	F 3.26	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.35
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.06	55.96	0.304	-0.12	
Factor 2	9.05	202.60	0.003	0.69	
Factor 3	0.44	3.18	0.507	0.08	
Factor 4	4.95	123.42	0.027	-0.57	
Factor 5	0.01	0.27	0.908	-0.05	
Factor 6	0.19	0.59	0.663	0.15	
Factor 7	0.02	0.17	0.898	0.02	
Factor 8	4.66	5.48	0.032	0.35	
Factor 9	2.21	8.23	0.139	-0.32	
Factor 10	5.01	14.50	0.026	0.44	
Disgrade	1.80	1.63	0.181	-0.24	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.8

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to
Subject, Status, Qualification and Age: Age Main Effect

Test of roots 1 through 1	F 3.51	df(hyp) 11.00	df(error) 250.00	p less than 0.001	R* 0.37
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	3.19	167.74	0.075	-0.07	
Factor 2	1.60	35.79	0.207	-0.04	
Factor 3	0.73	5.25	0.394	-0.38	
Factor 4	12.53	312.13	0.001	0.38	
Factor 5	3.59	72.77	0.059	0.13	
Factor 6	8.47	26.06	0.004	0.42	
Factor 7	14.39	143.63	0.001	0.51	
Factor 8	6.00	7.06	0.015	0.31	
Factor 9	0.21	0.77	0.651	-0.21	
Factor 10	3.08	8.92	0.080	0.24	
Disgrade	1.21	1.09	0.273	0.13	

*Canonical correlation between artificial ANOVA variables and criteria

Table 5.9

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status by Qualification Interaction Effect

Test of roots 1 through 1	F 2.49	df(hyp) 11.00	df(error) 250.00	p less than 0.006	R* 0.31
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	6.46	339.79	0.012	0.27	
Factor 2	8.02	179.56	0.005	0.45	
Factor 3	0.80	5.80	0.371	-0.06	
Factor 4	5.43	135.22	0.021	0.08	
Factor 5	0.09	1.76	0.769	-0.29	
Factor 6	0.20	0.63	0.652	-0.00	
Factor 7	10.77	107.53	0.001	0.54	
Factor 8	2.35	2.76	0.127	0.15	
Factor 9	2.24	8.36	0.136	-0.41	
Factor 10	2.43	7.02	0.120	0.28	
Disgrade	1.65	1.49	0.200	0.22	

*Canonical correlation between artificial ANOVA variables and criteria

From this relatively complex series of tables some important trends can be discerned, involving several consistently significant and recurring variables. These trends are summarised in Table 5.10, which presents each classificatory variable together with any main effects obtained, their levels of significance, and the significant two-way interaction effect derived from the MANOVAs.

The results of several four-way MANOVAs involving various permutations of the five classificatory variables showed consistently strong multivariate main effects for Sex, Subject and Age. Furthermore, as indicated in Table 5.10, subsequent univariate F tests revealed highly consistent patterns of dependent variables showing significant results, with each of these three classificatory variables. For example, Factors II, IV, VIII and X were significantly related to Subject in each of three MANOVAs using various combinations of classificatory variables. Neither Status nor Qualifications gave significant main effects but there was a significant Status by Qualifications interaction effect involving several dependent variables. Presentation and discussion of these significant results now follows.

Sex main effect

The MANOVA yielded a significant main effect for Sex ($F(11,250) = 3.21, p < 0.001$). Univariate F tests revealed significant Sex effects involving three dependent variable measures. On CONFIDENCE scores, male students rated their confidence and feelings of control associated with essay

Table 5.10

Summary of Multivariate Analyses of Variance (MANOVAs): Main Effects, Interactions, Levels of Significance and Significant Dependent Variables for Sex, Subject, Status, Qualifications and Age

CLASSIFICATORY VARIABLES	MAIN EFFECTS					INTERACTIONS
	Sex	Subject	Status	Qualifications	Age	
Sex by Subject by Status by Age	p < 0.001 Factors I, III, VIII, and perhaps X	p < 0.001 Factors II, IV, VIII, and X	N.S.	-	p < 0.001 Factors IV, V, VI, VII, and VIII	NIL
Sex by Subject by Qualifications by Age	p < 0.001 Factors I, III, VIII, and perhaps X	p < 0.001 Factors II, IV, VIII, and X	-	N.S.	p < 0.001 Factors IV, V, VI, VII, and VIII	NIL
Subject by Status by Qualifications by Age	-	p < 0.001 Factors II, IV, VIII, and X	N.S.	N.S.	p < 0.001 Factors IV, VI, VII, VIII and perhaps V	Status by Qualifications p < 0.01 Factors I, II, IV, and VII

writing higher than did the female students ($F(1,260) = 10.85, p < 0.001; \bar{X}_m = 35.91, \bar{X}_f = 32.95$)*; on CARE scores, female students rated themselves higher in terms of legibility and including material seen as important than did the male students ($F(1,260) = 5.94, p < 0.05; \bar{X}_m = 9.01, \bar{X}_f = 9.86$); and on FLOW scores, male students rated their ease and smoothness of writing higher than did the female students ($F(1,260) = 6.28, p < 0.05; \bar{X}_m = 3.53, \bar{X}_f = 3.17$). In addition, a marginally significant Sex main effect was apparent with respect to MARKER scores, with female students rating markers higher than did the male students ($F(1,260) = 3.65, p < 0.057; \bar{X}_m = 6.49, \bar{X}_f = 6.92$).

While there appear to be no research findings in this area with which to compare these results, it is worth noting that the higher factor scores for females on CARE and MARKER are consistent with the widely accepted beliefs that females tend to be more conformist than males, and to be more acculturated to the formal organisation of educational institutions. Some measure of support for this observation can be derived from a study by Keeling and Nuthall (1969) which showed that girls of higher scholastic ability may be more acculturated to the formal organisation of the school than boys of higher scholastic ability. Hence, the females in the present enquiry rate their legibility higher and perceive their markers in a more favourable light than do the males, who appear to be less concerned with legibility and more critical in their attitude towards markers.

* Lower case letters of m and f are used to refer to males and females respectively.

Conversely, the higher factor scores for males on CONFIDENCE and FLOW indicate a more relaxed approach to essay writing on their part and fit the traditional stereotype of males as less conscientious than females.

Subject main effect

The multivariate analysis of variance (MANOVA) also yielded a significant main effect for Subject ($F(11,250) = 3.29, p < 0.001$). Univariate F tests revealed significant Subject main effects on four dependent variable measures. On TIME scores, the Education students rated their budgeting skills higher than did the English students ($F(1,260) = 9.15, p < 0.01; \bar{X}_{ed} = 21.63, \bar{X}_{en} = 19.88$)*; on ADEQUACY scores, the English students rated their abilities to avoid undesirable essay features higher than did the Education students ($F(1,260) = 4.89, p < 0.05; \bar{X}_{ed} = 27.70, \bar{X}_{en} = 29.05$); on FLOW scores, the Education students rated their ease and smoothness of writing higher than did the English students ($F(1,260) = 4.05, p < 0.05; \bar{X}_{ed} = 3.40, \bar{X}_{en} = 3.11$); and on MARKER scores, the Education students rated markers higher than did the English students ($F(1,260) = 5.51, p < 0.05; \bar{X}_{ed} = 6.99, \bar{X}_{en} = 6.53$).

It is possible that these results indicate differences between Education and English in the kind of essay required of students. The precise nature of such differences, however, will be discussed in a subsequent section of the present chapter (see Part II: Staff Study),

* The abbreviations ed and en are used to refer to Education and English students respectively.

when the comments of staff have been described and analysed, since the respective emphases of Education and English markers may illustrate differences between these subject areas which are reflected in students' essay writing practices.

Age main effect

The multivariate analysis of variance (MANOVA) yielded a significant main effect for Age ($F(11,250) = 3.54$, $p < 0.001$). Univariate F tests showed significant Age main effects on five dependent variable measures, though in the Subject by Status by Qualification by Age MANOVA ORGANISATION was only marginally significant ($F(1,260) = 3.59$, $p < 0.059$). On ADEQUACY scores, students aged 21 years or over rated their avoidance of inappropriate essay features higher than did the students aged 20 years or younger ($F(1,260) = 13.71$, $p < 0.001$; $\bar{X}_{20} = 27.81$, $\bar{X}_{21} = 28.20$)*; on the ORGANISATION scores, students aged 21 years or over rated their skills of content organisation higher than did the students aged 20 years or younger ($F(1,260) = 4.41$, $p < 0.05$; $\bar{X}_{20} = 15.43$, $\bar{X}_{21} = 16.50$); on the AMOUNT scores, students aged 21 years or over rated their adherence to essay word limits more highly than did students aged 20 years or younger ($F(1,260) = 6.83$, $p < 0.01$; $\bar{X}_{20} = 5.57$, $\bar{X}_{21} = 6.27$); on the CHECKING scores, students aged 21 years or over rated their proof-reading for mechanical errors more highly than did the students

* The numerals 20 and 21 are used to denote students aged 20 or under and students aged 21 or over respectively.

aged 20 years or younger ($F(1,260) = 19.26, p < 0.001$; $\bar{X}_{20} = 11.02, \bar{X}_{21} = 12.71$); and on the FLOW scores, students aged 21 years or over rated their ease and smoothness of writing higher than did the students aged 20 years or younger ($F(1,260) = 5.42, p < 0.05$; $\bar{X}_{20} = 3.13, \bar{X}_{21} = 3.56$). Thus on all five dependent variable measures, the group of older students consistently rated themselves more highly than did the students in the younger age group.

These findings appear to indicate that the older students in the sample are more conscientious and, perhaps, harder working than the younger students since their scores on half the extracted factors differed significantly from those of the younger age group. Older students may well have had more experience in essay writing with more feedback, from staff marking their essays, on sound and unsound essay writing practices. Also, older students are traditionally regarded as more stable and more highly motivated than younger students. This view is supported by a recent article in the Times Literary Supplement (30.12.77) by Owen Surridge which reports the comments of Dr McDonald that "many of the assumptions commonly made about young students did not apply to the mature. They were more independent, more able and willing to take responsibility for their own learning, more experienced in life and had a wider range of general knowledge." In addition, "adult students tend to exhibit many of the qualities we often cite as characteristics of the ideal student; they are more self-directing, hard-working, determined, questioning and unwilling to accept second best." Given that older students attain higher factor scores on several essay writing

dimensions than younger students, the findings from the present study appear to be consistent with McDonald's portrayal of the traits of older students.

Status by Qualifications interaction effect

The multivariate analysis of variance (MANOVA) also yielded a significant Status by Qualifications interaction effect ($F(11,250) = 2.49, p < 0.01$), involving four dependent variable measures, i.e., CONFIDENCE, TIME, ADEQUACY and CHECKING. For ease of interpretation, means for each dependent variable have been arranged in tabular form along with the appropriate independent variables in their subgroups and the number of students in each category (in parentheses following each mean score). The means can be inspected in Table 5.11.

In addition, in order to determine whether there were any significant differences among the four means represented in each univariate analysis, a procedure described by Winer (1972, pp. 445-9) for testing simple effects was followed. The results obtained from this analysis are presented in Table 5.12.

Inspection of Tables 5.11 and 5.12 shows that when students do not have at least bursary qualifications it makes little difference to their scores on the three factors CONFIDENCE, ADEQUACY and CHECKING whether they are full-time or part-time students. But it makes a lot of difference with bursary-holders. Full-time students score markedly higher than part-timers on each of these three dependent variable measures. In addition, when

Table 5.11

Status by Qualifications Interaction Effect: Subgroup Means*
for the Significant Dependent Variables Arranged According
to Status and Qualifications

Factor	Status	Qualifications	
		Bursary or higher	Without bursary
CONFIDENCE (F(1,260) = 6.46, p < 0.05)	Full-time students	$\bar{X} = 35.75$ (80)	$\bar{X} = 34.18$ (115)
	Part-time students	$\bar{X} = 28.45$ (20)	$\bar{X} = 32.62$ (61)
TIME (F(1,260) = 8.02, p < 0.01)	Full-time students	$\bar{X} = 24.11$ (80)	$\bar{X} = 20.79$ (115)
	Part-time students	$\bar{X} = 18.05$ (20)	$\bar{X} = 22.36$ (61)
ADEQUACY (F(1,260) = 5.43, p < 0.05)	Full-time students	$\bar{X} = 29.10$ (80)	$\bar{X} = 28.68$ (115)
	Part-time students	$\bar{X} = 24.55$ (20)	$\bar{X} = 27.64$ (61)
CHECKING (F(1,260) = 10.77, p < 0.001)	Full-time students	$\bar{X} = 11.35$ (80)	$\bar{X} = 11.74$ (115)
	Part-time students	$\bar{X} = 9.30$ (20)	$\bar{X} = 12.54$ (61)

*The numbers in brackets after each mean indicate the number of
respondents in each subgroup.

Table 5.12

Status by Qualifications Interaction Effect: Significant Simple Effects Results for Each Dependent Variable with F Ratios and Levels of Significance

Factors	Simple Effects	F Ratio (df 1,260)	Significance Level
CONFIDENCE	Bursary-holders: full-time versus part-time	F = 23.11	p < 0.001
	Part-timers: bursary versus non-bursary	F = 7.54	p < 0.01
TIME	Bursary-holders: full-time versus part-time	F = 37.47	p < 0.001
	Full-timers: bursary versus non-bursary	F = 11.25	p < 0.001
	Part-timers: bursary versus non-bursary	F = 18.95	p < 0.001
ADEQUACY	Bursary-holders: full-time versus part-time	F = 29.96	p < 0.001
	Part-timers: bursary versus non-bursary	F = 9.58	p < 0.01
CHECKING	Bursary-holders: full-time versus part-time	F = 9.61	p < 0.01
	Part-timers: bursary versus non-bursary	F = 24.00	p < 0.001

students are full-time it makes little difference to their scores on CONFIDENCE, ADEQUACY and CHECKING whether they hold bursary or not. But it makes a lot of difference with the part-time students: bursary-holders score markedly lower than non-bursary-holders. The interaction effects are very consistent across these three dependent variables.

The dependent variable measures CONFIDENCE, ADEQUACY and CHECKING share a sufficiently high level of inter-correlation to lend support to an interpretation which considers the three factors together, in order to account for the significant differences among the students' scores on the three variables. The factor intercorrelations are provided in Table 4.3, which shows that CONFIDENCE and ADEQUACY correlate reasonably highly ($r = +0.50$, $p < 0.001$), while CHECKING and ADEQUACY have a somewhat more modest intercorrelation ($r = +0.30$, $p < 0.001$). CONFIDENCE and CHECKING have a low, though still positive, intercorrelation ($r = +0.14$, $p < 0.05$).

The trends with bursary-holders, whether full-time or part-time, are quite consistent among the three factors. Part-timers have the lowest factor scores of any group on each of CONFIDENCE, ADEQUACY and CHECKING, i.e., they are more apprehensive and uncertain in their approach to essay writing, appear less concerned with avoiding those features of essays which tend to contribute to low grades and make fewer checks for mechanical errors in their essays than the other three student groups. Full-timers, on the other hand, have the highest factor scores of any group (except on CHECKING), i.e., they are the least apprehensive in their

approach to essay writing and appear the most concerned with avoiding those features of essays which tend to contribute to low grades of any of the four groups of students. In addition, they make more frequent checks of their essays for mechanical errors than do the part-time bursary-holders.

The finding that the part-time students, in general, have lower factor scores than the full-time students (except on CHECKING, where the difference between full-time and part-time students who do not hold bursaries is not significant in any case) is not surprising. Comparisons of the performance of first-year students tend to show that part-timers are significantly less successful in examinations than full-timers, and a larger percentage fail all their subjects than full-timers. For example, at the University of Canterbury, where a comparison was made of the 1970 intake of first-year students, the number of part-time students failing all their subjects was 50 per cent, significantly higher than the 20 per cent of full-time students who failed all their subjects (E.R.A.U. Report No. 37, pp. 6-7). Although the present investigation is concerned with essay writing behaviour rather than examination performance it is not unlikely that the tendency for part-timers to perform less successfully in their first year at university would be reflected in factor scores which were lower than those of the full-time students, since the factor scores are partial measures of their essay writing attitudes and practices. Thus, the finding that two equally well-qualified groups (i.e., the bursary-holders) have

significantly different CONFIDENCE, ADEQUACY and CHECKING scores can perhaps be interpreted as a consequence of their different status, i.e., whether they are full-time or part-time students.

Part-time bursary students, however, not only have lower factor scores than both groups of full-timers but also have significantly lower factor scores than part-timers who do *not* hold bursary. There appears to be a reasonably acceptable interpretation of this finding, however, which rests on the assumption that the part-time bursary-holders may have a lower level of motivation than the other groups and, in particular, than the part-time non-bursary-holders. The more highly qualified students have already proved themselves at school, since they hold at least a 'B' bursary. Perhaps, in part because they are reasonably well-qualified, unlike the non-bursary part-timers, they adopt a more careless approach towards essay writing, i.e., they fail to make as concerted an effort in their essay writing as the non-bursary part-timers. Conversely, the non-bursary part-timers, who are not so well-qualified, try harder: they make more of an effort to write essays well and may be more highly motivated than the bursary-holding part-timers. Consequently, their scores on CONFIDENCE, ADEQUACY and CHECKING are significantly higher than the bursary-holding part-timers.

While lower factor scores do not necessarily imply lower academic performance and, in particular, lower essay grades, the factor scores do provide a partial measure of students' perceptions of their own essay writing practices

and attitudes. Consequently, it is interesting to note that a comparison of the average scores of bursary-holding part-timers and non-bursary-holding part-timers on item 28, 'I receive good grades for my essays (i.e., 'B' or higher)', reveals that the bursary-holders, with an average score of 2.70, rate themselves somewhat lower than the non-bursary holders, who have an average score of 3.15 on this item. It is not unlikely, therefore, that the part-time bursary-holders have a lower level of attainment in essay writing than the non-bursary holders.

In addition, although the lower CONFIDENCE scores for the part-time bursary-holders indicate that they are more apprehensive and less assured than their non-bursary counterparts, this does not necessarily indicate a tendency for them to try harder; their lower scores may reflect feelings of anxiety associated with their taking less effort in their essay writing practices than the somewhat more highly motivated, more confident and possibly higher achieving non-bursary part-timers.

The interpretation that the two groups differ in their levels of motivation is reinforced by examining differences in the composition of the bursary-holding and non-bursary-holding part-time groups. Although students from both the Education and English departments belong to both groups, there are substantially more Education students in each group. But, proportionately, there are more Education than English students in the non-bursary group than there are in the bursary group: there are three times as many among the non-bursary holders (i.e., 46 Education

students compared to 15 English students), with just under twice as many among the bursary-holders (i.e., 13 Education students compared to 7 English students). Consequently, it is arguable that the differences in factor scores between the bursary-holders and the non-bursary-holders can largely be explained by examining traits which are more apparent in the non-bursary Education students than in either the English students, whether they hold bursaries or not, or the bursary-holding Education students.

A comparison of age differences among the part-time students provides support for this interpretation. While 40 per cent of the bursary-holders are over 20 years, 61 per cent of the non-bursary-holders are aged over 20; when these figures are further analysed, only 5 per cent (i.e., one student) of the bursary-holders but 41 per cent (i.e., 25 students) of the non-bursary-holders are aged over 25. Of the latter group, four times as many are Education students as English students. Thus, the non-bursary-holders, as a group, are more mature than the bursary-holders, and, proportionately, more are older Education than English students. Leaving aside the subject differences, however, that there is a tendency for the older students to score significantly higher than the younger students is shown by the significant univariate Age main effects, particularly on ADEQUACY and CHECKING. (See p.84.) The finding that part-time non-bursary-holders score significantly higher than the part-time bursary holders is, therefore, not surprising when their age differences are considered.

Further, it is possible that the non-bursary-holding

Education students have considerable intrinsic interest in Education due to their having been associated with the education system or children before enrolling in the subject. They are older students, are likely to be trainee or practising teachers or to have reared children, may have a more settled life-style or more confidence and many of them may not have full-time employment except as working housewives. Such traits may well contribute to a highly motivated group of students. The bursary-holding students, on the other hand, are less likely to share those traits. They tend to be younger and, since they are both well-qualified and part-time, may well be engaged in paid employment, with a less settled life-style. Their lower factor scores on CONFIDENCE, ADEQUACY and CHECKING than those of the non-bursary-holding students could well indicate a lighter commitment to their essay writing activities, stemming from a life-style which is less conducive to settled study, with a consequent reduction in both effort and motivation.

With the dependent variable measure, TIME, some of the results are consistent with those attained on CONFIDENCE, ADEQUACY and CHECKING. Thus, with non-bursary-holders, it makes little difference to their scores whether they are full-time or part-time students while, with bursary-holders, full-timers score markedly higher than part-timers. In addition, with part-time students, bursary-holders score markedly lower than non-bursary-holders. On TIME, however, being full-time does make a difference to the students' scores, unlike on CONFIDENCE, ADEQUACY and CHECKING where

full-timers, irrespective of qualifications, do not achieve significant differences in their factor scores. Full-time students holding at least a bursary score markedly higher than full-time students without a bursary.

Full-time bursary students, therefore, budget their time for essay writing tasks better than the other groups of students. Although non-bursary-holding students do not differ significantly in their management of time, both full-time non-bursary-holders and part-time bursary-holders organise their time less carefully than the full-time bursary-holders, while part-time bursary-holders budget their time least effectively of all.

It is possible to explain some aspects of this complicated interaction by applying a similar interpretation to that suggested for the differences among scores on CONFIDENCE, ADEQUACY and CHECKING. Part-time bursary-holders may be less careful in their management of time because of a more harried existence and a lower level of motivation; although well-qualified, they appear to have less time for essay writing, possibly because they have full-time employment. Consequently, they put less effort into organising their writing activities than any of the other groups. The non-bursary part-timers, however, take more care over budgeting their time, partly because they are more highly motivated than the bursary-holding part-timers or because they have already learned how to organise their study to fit in with family responsibilities. Alternatively, because they lack the qualifications of the bursary-holding part-timers, organising essay writing tasks

in order to write satisfactory essays may demand more of their time.

Full-time bursary-holders, being more involved with their studies than either part-time group, may well have acquired more appropriate study habits than the part-timers or the full-time non-bursary-holders. They are, after all, better qualified and more successful students, at least upon entering university, than the non-bursary full-timers. It is likely, therefore, that budgeting time for essay writing is regarded by the full-time bursary-holders as an important ingredient of success at university.

PART II: STAFF STUDY

DIFFERENCES AMONG THE MARKERS AND BETWEEN DEPARTMENTS ON THE MARKING AND SIGNIFICANT FEATURES OF ESSAYS WRITTEN BY UNDERGRADUATE STUDENTS QUESTIONNAIRE (MSFQ)

Responses to the two tables contained in the MSFQ were tabulated; their distributions can be examined in Tables 5.13 and 5.14. In addition, items in each table were ranked in order of importance as noted by the markers. The item rankings can be inspected in Tables 5.15 and 5.16. The tables provide an indication of differences in emphasis between the two departments.

Spearman's rank order correlation for the sets of English and Education ranks in Table 5.15 was computed yielding $\rho = +0.52$. This suggests a very modest relationship between the two sets of rankings implying some measure of agreement between the two departments but with considerable discrepancies between them as well.

Table 5.13

Frequency of Response per Category of Concern for Twenty 'Inappropriate' Essay Features

ESSAY FEATURES	DEGREE OF CONCERN			
	Serious	Moderate	Mild	None
greatly exceeding the suggested word length	3	2	4	3
errors of fact	8	3	1	-
untidy handwriting	-	5	4	3
incorrect bibliographical details	3	2	7	-
poor spelling of names, terms in course	6	2	3	1
long, rambling paragraphs	8	2	-	2
not providing a wide margin	1	1	5	5
chunks of copied, unattributed material	12	-	-	-
confused interpretation of the topic set	12	-	-	-
irrelevant material	4	7	1	-
inadequate reasoning	9	3	-	-
simple grammatical errors	3	6	1	2
omitting quote marks (i.e., with phrases or sentences)	3	4	4	1
poorly connected paragraphs	4	8	-	-
hasty construction (i.e., of whole essay)	7	5	-	-
obscure meaning	7	5	-	-
awkwardly expressed sentences	7	3	2	-
use of the first-person	2	2	2	6
poor punctuation	4	4	2	2
sweeping generalisations	9	3	-	-

Table 5.14

Frequency of Response per Category of Importance for Twenty 'Ideal' Essay Features

ESSAY FEATURES	DEGREE OF 'IMPORTANCE'			
	Demand	Expect	Prefer	Indifferent
clear statement of intentions	-	10	1	1
smooth transition between paragraphs	1	7	4	-
holding a particular position on the topic/issue	-	2	10	-
a punchline or observation of interest in the conclusion	-	-	8	4
logical steps in the overall argument	7	4	1	-
defining important terms in the question	5	5	2	-
student's own ideas	3	4	5	-
a discernible introduction	3	6	3	-
wide reading on the topic	1	5	4	2
sound reasoning	8	4	-	-
absence of mechanical errors	4	2	5	1
a clear style of writing	5	-	7	-
one major idea in each paragraph	2	4	5	1
impeccable grammar	3	2	5	2
concise expression	1	8	3	-
detailed evidence for controversial statements	6	6	-	-
writing consistently on the topic	6	6	-	-
a sense of flow	1	9	2	-
material you consider significant	2	6	4	-
clear structure (e.g., introduction/developmental section/conclusion)	4	7	1	-

Table 5.15

The Twenty 'Inappropriate' Essay Features Ranked According to Concern
Felt by Education Staff and English Staff

ESSAY FEATURES	EDUCATION RANK		ENGLISH RANK	
	Rank	Weighted Score	Rank	Weighted Score
chunks of copied, unattributed material	1=	18	1=	18
confused interpretation of the topic set	1=	18	1=	18
inadequate reasoning	3=	17	8=	16
sweeping generalisations	3=	17	8=	16
errors of fact	6=	14	5=	17
hasty construction (i.e., of whole essay)	3=	17	13	14
obscure meaning	6=	14	5=	17
awkwardly expressed sentences	10	12	5=	17
long, rambling paragraphs	11	10	1=	18
poorly connected paragraphs	9	13	11=	15
irrelevant material	6=	14	14	13
poor spelling of names, terms in course	14=	7	1=	18
poor punctuation	17=	6	8=	16
simple grammatical errors	14=	7	11=	15
omitting quote marks (i.e., with phrases or sentences)	12	9	15=	12
incorrect bibliographical details	13	8	15=	12
greatly exceeding suggested word length	17=	6	17	11
untidy handwriting	20	5	18	9
use of the first-person	14=	7	19	5
not providing a wide margin	17=	6	20	4

Average score for Education markers = 37.5

Average score for English markers = 46.8

Table 5.16

The Twenty 'Ideal' Essay Features Ranked According to Their Importance
as Perceived by Education Staff and English Staff

ESSAY FEATURES	EDUCATION RANK		ENGLISH RANK	
	Rank	Weighted Score	Rank	Weighted Score
sound reasoning	1=	16	1=	16
logical steps in the overall argument	3	15	4=	15
detailed evidence for controversial statements	1=	16	7=	14
writing consistently on the topic	4	14	1=	16
defining important terms in the question	6=	12	4=	15
clear structure (e.g., introduction/developmental section/conclusion)	5	13	7=	14
a discernible introduction	6=	12	11=	12
a sense of flow	11=	10	10	13
a clear style of writing	17=	6	1=	16
student's own ideas	6=	12	16=	10
material you consider significant	9=	11	14=	11
concise expression	11=	10	11=	12
absence of mechanical errors	17=	6	4=	15
smooth transition between paragraphs	11=	10	14=	11
clear statement of intentions	9=	11	16=	10
impeccable grammar	19=	4	7=	14
one major idea in each paragraph	15=	7	11=	12
wide reading on the topic	14	9	18	8
holding a particular position on the topic	15=	7	19	7
a punchline or observation of interest in the conclusion	19=	4	20	4

Average score for Education markers = 34.2
Average score for English markers = 40.8

Table 5.15 is concerned with 'unfavourable' aspects of essays. Thus English staff members gave 'long, rambling paragraphs' a ranking of one, reflecting their view that it was, with other features, the most 'unfavourable' essay feature, while the Education staff assigned 'long, rambling paragraphs' a ranking of eleven; 'poor spelling of names, terms in course' is given an English ranking of one and an Education ranking of fourteen; and 'poor punctuation' is assigned to eighth place by English markers but to seventeenth place by Education markers. On the other hand, some items were ranked higher by Education staff members. 'Hasty construction' is ranked third by Education markers but thirteenth by English markers; 'irrelevant material' received a ranking of six from Education staff but of fourteen from the English markers; 'inadequate reasoning' and 'sweeping generalisations' are assigned rankings of three by the Education staff but eight by the English markers; and 'use of the first-person' is given an Education ranking of fourteen and an English ranking of nineteen. There are further differences in the rankings assigned by the staff members from each of the departments but they are less widely separated.

Both departments appear to be reasonably concerned by 'chunks of copied, unattributed material' and 'confused interpretation of the topic set' which received rankings of one by each department. In addition, 'errors of fact' and 'obscure meaning' are assigned rankings of six by Education staff, and five by English staff. Neither department, however, appears to be very worried about

'greatly exceeding the suggested word length', 'not providing a wide margin' or 'untidy handwriting' which all received rankings equivalent to or less than seventeenth.

While both the departments are concerned about plagiarism and misinterpreting the essay topic, they appear to have some important differences in emphasis. English staff members are more concerned with incisive writing and spelling, while Education staff members are more concerned about logical skills such as incorporating appropriate material and reasoning soundly. It is worthwhile at this point to examine the responses of staff members to the first question in the MSFQ, which is concerned with the functions of undergraduate essays. Education staff members emphasise clarifying thinking or the extension of understanding as functions of essay writing, e.g., 'to provide students with an opportunity to think through issues arising during the course', or the opportunity to use specific skills such as 'the practice of substantiating views with appropriate evidence', 'to apply a particular method of analysis' or 'to assess the validity of a writer's assessment'. English staff members, on the other hand, stress critical writing, e.g., 'coherent, orderly, critical assessments', or the development of specific skills such as 'basic literary-critical skills', 'articulateness, organisation of ideas, clarity of thought' or the ability to conduct 'a logically ordered argument within the terms of the discipline of English'.

It is likely that these differences in emphases simply reflect perceptions of the staff members about the

nature of the subjects involved, and, consequently, their assessment role. In Education, the ability to analyse views, to argue a case is stressed, while in English the development of clear expression and critical analysis are emphasised. This is not to suggest that Education staff ignore mechanical skills. Responses to question three (a) (see Appendix D where the MSFQ is presented) on the types of corrections made, show clearly that spelling and grammatical mistakes are corrected by markers in Education as well as in English since all markers in both departments admitted making such corrections; however, it is possible that differences in the number of corrections made or the penalties attached to frequent errors varied from one department to the other. That this is likely is shown by the markers' responses to question three (b), on the frequency of correction. While all English markers claimed to correct all or most of the errors in their students' essays, only half of the Education markers used these categories, the other half making less frequent corrections. The markers can also be differentiated according to the length of comments claimed as typical. Half the Education staff stated that they put reasonably detailed comments on essays marked, half that their length of comment varied. The English markers, however, were more varied in their responses. While half claimed to put fairly brief comments on essays, one claimed to make reasonably detailed comments and two stated that their practice varied. Finally, with regard to deductions, five out of six of the English markers claimed that they deducted marks (up to 10%) for certain

types of error. Most frequently mentioned were spelling and grammatical mistakes since, as one marker stated, 'in an English essay the writing of relatively correct English seems to be fairly important; with syntax and punctuation the errors also (usually) lead to distortion of the writer's intentions'. Of the Education staff, however, four claimed that they did not deduct marks for specific types of error, two that they did, but neither specified the amount of the deductions. Those that deducted marks did so for lack of understanding, i.e., missing critical points or lack of research, rather than for matters of expression.

Table 5.16, which is concerned with 'ideal' essay features, provides indications of further differences in the emphases of the two departments. Again Spearman's rank order correlation for the sets of English and Education ranks was calculated, in this case yielding $\rho = +0.34$. This suggests a low relationship between the two sets of rankings implying a very small measure of agreement between the two departments with considerable discrepancies between them as well. English staff members emphasised 'a clear style of writing', a ranking of one being assigned to this feature compared to the Education staff's ranking of seventeen. 'Absence of mechanical errors' is assigned a ranking of four by the English markers, but a ranking of seventeen by the Education markers, while 'impeccable grammar' has an English ranking of seven and an Education ranking of nineteen. Conversely, the Education staff ranked certain 'ideal' features higher than did the English staff. 'Detailed evidence for controversial statements' was given a

ranking of one, compared to seven for the English staff; 'student's own ideas' ranked sixth, compared to the English ranking of fourteen; 'clear statement of intentions' was assigned a ranking of nine with the English markers' ranking of sixteen; 'a discernible introduction' was ranked sixth by the Education markers, eleventh by the English staff; and 'material considered significant' was rated at ninth place by the Education markers, compared to fourteenth for English staff members.

Both departments, however, rated 'sound reasoning' as a high priority, as well as 'logical steps in the overall argument' and 'writing consistently on the topic'. Neither department appeared to be particularly concerned by 'a punchline or observation of interest in the conclusion'.

It is important to note that even though, in many instances, the rankings of individual items differ between the two departments there is a tendency for the English staff to assign more items to categories which show a higher level of concern or, alternatively, to reveal the attachment of greater importance to the items. A comparison of total scores obtained on each of the tables reveals this tendency. Thus, the average score for English markers on the 'inappropriate' features table is 46.8, but only 37.5 for the Education markers. Similarly, on the 'ideal' features table, English markers have an average score of 40.8, while Education staff average 34.2. In both cases the highest score attainable is 60 (i.e., the maximum value attached to any one item is three, and there are twenty items in each table). The higher level of concern shown by

English markers possibly reflects their role as traditional 'guardians of the language'; hence they pay more attention to matters of expression and possibly style than the Education markers do. Similarly, the greater degree of importance attached to 'ideal' essay features, may indicate a greater awareness on the part of English markers of their need to maintain standards in essay writing. It is worth noting, however, that as they regard both content and form as important assessment aspects they are more likely to obtain higher overall scores than the Education workers to whom 'formal' or 'mechanical' aspects are regarded as less important.

The importance attached to a clear style, accurate grammar and lack of mechanical errors by the English staff clearly illustrates their emphases when compared to the comments of the Education staff members. The Education markers appear to give more weight to essay content, i.e., the way ideas hang together, rather than expression. In addition, the Education markers appear to be less concerned than English markers about the presence of 'inappropriate' features in essays, and to be less 'prescriptive' about 'ideal' essay features, when average scores by both groups on the two tables are taken into account.

When staff members are compared according to the features which are stated to influence their overall assessment of essays, a tendency for markers in each department to emphasise different features emerges, consistent with the foregoing observations. Thus more Education staff mention organisation, grasp of relevant

ideas and understanding the essay question as features influencing their essay assessments, while more English staff mention correctness or adherence to a particular style. However, all the English markers give coherent argument as a feature, and four of them originality, compared to half the Education markers in each case. On the other hand, no Education markers mention mechanical features as assessment influences.

An examination of responses to the question 'What stands out most in your mind as i) indicating a good essay ii) indicating a poor/failing essay?' further reinforces the view that markers in English are more concerned with expression than Education markers. Responses to this question are presented in Table 5.17. Although Education markers stress features which could be labelled loosely 'topic handling' (i.e., whether the approach adopted is original, developing significant points, using appropriate evidence, organising the main ideas, the force of the argument, understanding) they appear not to be greatly concerned with the quality of the expression; the English markers, on the other hand, stress both the quality of the content (or 'argument') and the form of the content, i.e., the expression of the ideas, in terms like mechanical accuracy, good expression, articulate and so on. Those essay features indicating a poor/failing essay are, for the Education markers, largely examples of mishandled content, while, for the English markers, faults of expression are commonly mentioned, often in fairly strong terms, e.g., illiteracy, carelessness and unjustified

Table 5.17

Responses of Education and English Markers to the Question
'What stands out most in your mind as i) indicating a good essay ii) indicating a poor/failing essay?'

	Education markers	
Marker	Good Essay	Poor/failing Essay
1	Originality of approach	Common-sense burblings or undigested notes
2	Developing critical points which demonstrate understanding	Lack of opposite feature
3	Good grasp of what the question means and what is appropriate evidence	Copied, fails to answer the question, uses irrelevant material
4	Organising the principal ideas required to answer the question into an essay	Incoherence
5	The clarity and force of the argument	Missing the point, muddling crucial distinctions
6	Research/understanding/organisation/originality/persuasiveness/clarity	Lack of opposite features
	English markers	
1	Originality, clarity of expression and argument, mechanical accuracy	Lack of opposite features
2	Coherent argument, literary presentation, originality, accuracy	Carelessness and unjustified self-confidence
3	Evidence that the student has thought for himself, understood the question, with a logical full answer and good expression	Failure to comprehend topic and/or text, incomplete answers, poor presentation
4	Well-organised, carefully thought out, articulate discussion of the topic set	Disorganised ideas, no grasp of the work's themes, inarticulateness
5	Good, original ideas, good knowledge of the subject	Faults in expression, poor information, lazy preparation
6	Originality, insight	Plagiarism and illiteracy

self-confidence.

The previous remarks are most useful when the significant univariate Subject main effects obtained on four dependent variable measures, i.e., TIME, ADEQUACY, FLOW and MARKER, are considered. On ADEQUACY scores English students rated their abilities to avoid undesirable essay features higher than did the Education students. It is possible that, given the emphases of English markers, English students perceive the need to avoid specific types of error as being more urgent than it is perceived by Education students, whose rating on ADEQUACY indicates that they are less concerned to avoid penalisable essay features. Conversely, the Education students may feel that there is less need for them to try and avoid the errors listed in the items constituting ADEQUACY because they recognise that their markers are likely to place less emphasis on such features.

That Education students think more highly of their markers than do English students could partially reflect the lighter emphasis placed on certain inappropriate essay features by Education markers compared to English markers. On the other hand, it is possible that Education students are given more assistance in essay preparation by their tutors than are English students. In addition, Education students rated their budgeting skills more highly than did the English students; it is possible that the type of essay Education students are required to write is less amenable to a quick effort; this impression is partially supported by the finding that Education markers placed 'hasty

construction' considerably higher in their ranking of 'inappropriate' essay features than did the English markers. Further, it is possible that English students rate their ease of progression in writing lower than do the Education students because their essays contain more elements capable of inhibiting their sense of flow, i.e., awareness of the requirements of English markers may contribute to a more erratic style of writing.

Markers were also asked to indicate the extent to which they would assist students who wanted to improve their essay writing skills. Eleven out of the twelve markers indicated a willingness to do so *if* requested by a student; the remaining marker considered that he would not be able to give assistance in any case. For Education markers, advice on improvement ranged from reading good essays in the appropriate subject or the diagnosis of errors in bad essays to individual assistance with specific problems; English markers, on the other hand, recommended consulting various books, practising the writing of essays and reading more often, while one marker gave the following response: 'I'm completely ignorant of anything that might be suitable'.

Finally, in response to question 7, Education markers considered that some students were adequately prepared for university writing demands, but that many were not. English markers were of the same opinion. For Education markers, the inability of students to organise their answers and to distinguish the important from the unimportant were regarded as deficiencies, while for the English markers, faults in

grammar and choice of words were regarded as deficiencies. These observations are consistent with the emphases already noted between the two departments. Both departments considered that better school teaching was required before students came on to university but that once there tutors ought to play a more important role in assisting students who had writing difficulties.

Since different departments appear to have varying emphases with regard to essay writing features deemed essential, it seems that the nature of the advice given to students, whether by tutors, remedial writing assistants, or high school teachers, is likely to vary in its usefulness unless students are aware of both departmental criteria used in assessing essays, and the appropriate skills of organisation or expression which students require if they are to write acceptable essays. There appears to be no single remedy for the improvement of undergraduate essay writing techniques.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

The results of the student study indicate that there are a number of significant differences among various groups of undergraduate students in two Arts departments in their adherence to specified essay writing procedures and attitudes. Female students rated themselves higher than males with regard to the care taken over handwriting and had a more favourable attitude towards their markers than the somewhat harsher males. Conversely, male students rated their level of confidence associated with essay writing and their tendency to write in a smooth manner higher than did the females. It is possible that female students are more conscientious than their male counterparts: consequently, they appear to be more concerned about their essay writing techniques as shown by their lower level of self-confidence. Education students had more favourable attitudes towards their markers than did English students. In addition, the Education students rated their smoothness of writing and their skills in budgeting time higher than did the Education students who, for their part, rated their avoidance of inappropriate essay features higher than did the Education students. Differences in emphases within particular subject areas or departments may partially account for these findings. Also, students aged 21 or over rated themselves higher than did the students aged 20 or under in their

avoidance of inappropriate essay features, their skills in organising essay content, their adherence to essay word limits, proof-reading for mechanical errors and smoothness of essay writing, possibly because they are harder-working, more conscientious or have had more practice at writing essays than the younger age group.

Perhaps the most interesting, yet unexpected, finding, however, was that part-time students holding at least a bursary rated themselves as less confident, less concerned with avoiding inappropriate essay features and making checks for mechanical errors, and less effective in budgeting their time than the more poorly qualified part-timers, i.e., those who did *not* hold at least a bursary. It was suggested that the level of motivation of part-time bursary-holders was considerably lower than either full-time students, regardless of qualifications, or part-time non-bursary-holders since the latter group in particular appeared to be both older and harder-working than the part-time bursary-holders, as well as being more highly motivated, with a greater interest in their subject.

The results from the staff study, designed to complement the student study but with a secondary role in the present investigation, show that different departments appear to have varying emphases with regard to features required in their students' essays. While both the English and Education markers regarded some essay attributes as very important or inappropriate their views differed markedly on certain other features. Markers in the English department are more concerned with clarity of style and mechanical

accuracy, while Education markers are more concerned with logical skills such as the incorporation of appropriate material and sound reasoning. The functions of essays were viewed differently in each department: English markers considered the development of critical analysis using appropriate language to be the main purpose of essay writing, and were more prepared to deduct marks for poor expression, while the Education markers stressed the development of powers of argument and selection of pertinent material, and were unlikely to deduct marks for poor expression or for any specific inappropriate feature. Both departments, however, ranked plagiarism and misinterpreting the essay topic as major inadequacies, as well as factual mistakes and lack of clarity in meaning, and considered sound reasoning, a logically developed argument and consistent writing on the topic to be required essay features. There was a marked tendency though for English markers to be more concerned in general about 'inappropriate' essay features and to be more demanding with regard to 'ideal' essay features; it is likely that this tendency reflects their implicit role as 'guardians of the language', with the result that they assess both content and expression in essays, whereas Education markers appear to restrict their assessment largely to the arrangement of the content, giving considerably less weight to matters of expression.

The differences in essay features required by the two departments need to be borne in mind when considering the role of the staff study as an adjunct to the student study. One of the purposes of the present investigation was to

determine the level of awareness by students of departmental criteria regarding appropriate essay practices. The model of essay writing which was developed in Chapter Three postulated that the essay features required or expected by essay markers are the tangible evidence of the application of specific essay writing techniques or skills by students. Thus, for example, the finding that Education markers regarded hasty construction as a highly inappropriate essay feature, ranking it considerably higher than did the English markers, may indicate that in Education students are *more* likely than in English to require sound skills of budgeting time and the logical arrangement of essay material. It is interesting to note, therefore, that Education students rated themselves significantly higher on the factor TIME than did the English students. TIME represents essay writing techniques which determine whether a student's essay is prepared hastily or with due allowance for the time required for the task. Conversely, the finding that English markers gave considerably more weight to impeccable grammar and the avoidance of long, rambling paragraphs than did the Education markers suggests that English students require skills which enable them to avoid those kinds of inadequate essay features, if they are to meet their markers' standards. This seems to be the case since, on the factor ADEQUACY, English students rated their avoidance of essay features which are likely to be penalised significantly higher than did the Education students. There is, therefore, some measure of support for the view that students perceive differences in departmental emphases regarding the

appropriateness of specific essay writing features, since both Education and English students significantly differed in their factor scores on TIME and ADEQUACY, apparently in accordance with the emphases of their respective markers.

It seems likely that, if students are aware of different requirements in different subject areas (as indicated by significant variations in their essay writing practices), they would also be aware, to a certain extent, of features which are regarded as equally important by both departments. Again, there is some support for this view. When the average scores for each factor are divided by the number of items loading on each factor, a mean item value can be derived. The factor on which students attained the highest mean item value is INVOLVEMENT ($\bar{X} = 3.92$), denoting techniques connected with the interpretation of essay topics. This score indicates that the students in the sample more frequently adopt practices which are concerned with interacting with the essay question than any other practices. Confused interpretation of the topic set is ranked by staff members in both Education and English as the equal highest inappropriate essay feature. It is worthwhile, at this point, noting Nimmo's (1977) observation on essay weaknesses that "the most damaging error of all is failure to understand the meaning of the question itself" (p. 186). It seems that, on this feature at least, students and staff appear to be in agreement as to its central importance in essay writing.

LIMITATIONS OF THE PRESENT ENQUIRY

It is possible that the weight given to the staff study in the present enquiry, due to the relatively unsophisticated analysis of the staff data, merely hints at the complex relationships between students and staff with regard to what constitutes a sound as distinct from an unsound essay. The staff findings, though worthwhile in themselves as indications of the kinds of features required by essay markers in two Arts departments, and of the different emphases between departments, have a limited usefulness in their present form since they are largely suggestive, rather than definitive. There is clearly a need for studies which use a variety of analytic techniques for comparing the marking practices of staff, both within and between departments.

In addition, there were a number of methodological problems to be overcome. It was necessary to develop appropriate instruments to gauge the practices and attitudes of students concerned with the writing of essays, and the views of staff members on the features they considered essays required. Consequently, the essentially innovative nature of the questionnaires devised needs to be borne in mind. Computation of the students' factor scores, for example, was done by using only 46 of the original 76 EWQ items. Further research on student essay writing techniques may require the use of a more refined scale which includes only items shown to be satisfactory indicators of specific essay writing techniques; a step has been made in this direction, however, by emphasising only those items clearly

loading on recognisable essay writing dimensions.

The staff sample was a small one, with only a dozen markers. However, for practical reasons, a large staff sample was not included in this study. It was decided to limit the participation of markers to those staff members who were responsible for assessing the essays of the students in the student sample. In this way, it was hoped that pertinent observations could be made linking the kinds of techniques adopted by students in the two departments to the kinds of features required by staff in those same departments.

In addition, the extent of the enquiry was restricted. Two departments only were surveyed and it is likely that the findings are restricted in their generalisability to students in those departments only, i.e., English and Education, and at the University of Canterbury. In addition, the present investigation focussed on students taking first-year and third-year courses, rather than students at all course levels. It would be worthwhile to conduct similar studies of students at all levels in other departments where essays are an important means of assessing students, and to extend such studies to other tertiary institutions, in order to determine whether the same differences exist between males and females, younger and older students, and students in various Arts departments as were discovered in the present study. It is possible that the degree of awareness on the part of students regarding their markers' requirements differs from subject area to subject area. However, it was not intended in the

present enquiry to provide a detailed inventory of all the skills required for effective essay writing in different departments or of all the features used by staff in making their assessments. The present study has established that different groups of students vary in their essay writing techniques, and that different departments tend to emphasise varying essay features; further research can be instigated which attempts to confirm or disconfirm such differences using precisely formulated hypotheses.

Research on student essay writing techniques could profitably be assisted by a detailed theoretical model of the skills required in essay writing. The model described in Chapter Three is limited in scope, since it was designed only to provide an indication of some of the basic and somewhat more complex skills which appear to be involved in essay writing, as a logical framework for the design of the EWQ. The logical, linguistic, planning and presentation skills discussed require extensive research in order to establish their importance in essay writing, and the precise kinds of cognitive operations which students need to have acquired facility in handling if they are to write good essays. It has been suggested (Myklebust, 1965) that written language represents the peak of man's linguistic achievement, and that the development of writing has received very little research, in spite of its considerable practical implications for undergraduate students. A sound model of essay writing skills could contribute to such an understanding, as well as providing indications of skills which students need to develop.

EDUCATIONAL IMPLICATIONS

Clearly, if students are to succeed at the tertiary level in the writing of essays, there is a need for greater knowledge of the precise features looked for by essay markers when assessing essays. If students know what is expected of them, it is likely that they can learn to tailor their writing to their markers' requirements. It is open to question, however, whether the optimal development of essay writing techniques depends simply on knowing what to do. Knowledge of appropriate courses of action does not necessarily induce such action: merely to indicate to students which techniques are likely to produce sound or unsound essay features in any given subject does not guarantee immediate improvement. On the other hand, if any remedial steps are to be taken at all, staff members need to define those essay characteristics which they regard as desirable. In addition, staff members need to develop effective means of communicating their standards to their students.

Ultimately, however, the motivation of individual students is likely to be the decisive factor in provoking essay writing improvement. The development of their skills of organisation and powers of expression is possibly a function of past experience with a variety of essay markers; thus practice in writing is likely to remain the most important method for the attainment of a higher level of acceptable essay writing performance. Staff can help by defining desirable features but the final responsibility must lie with the student himself. As has been indicated

in the present enquiry, highly qualified students are not necessarily the essay writers with the soundest techniques.

ACKNOWLEDGEMENTS

This thesis represents the encouragement, guidance and co-operation of many people who gave their support in several ways. My thanks are due to all these people.

In particular, I wish to thank two members of the Education Department of the University of Canterbury: Mr B. Keeling for his tireless support and essential guidance throughout the investigation, and Professor P.J. Lawrence for his help in the studies' early stages.

Special thanks are also due to students and staff of both the Education and English Departments of the University of Canterbury without whose co-operation and participation the studies could not have been conducted.

Finally, I wish to thank my wife, Ketty, for her moral support and patience during my university study.

REFERENCES

- Anderson, J., Durston, B.H., and Poole, M. Thesis and Assignment Writing. Sydney: John Wiley and Sons, 1970.
- Barzun, J., and Graff, H.F. The Modern Researcher. New York: Harcourt, Brace and World, 1957.
- Bloom, B.S. *et al.* Taxonomy of Educational Objectives: Cognitive Domain. New York: David McKay, 1956.
- Bock, R.D. Multivariate Statistical Methods in Behavioural Research. New York: McGraw-Hill, 1975.
- Bock, R.D. Programming univariate and multivariate analysis of variance. Technometrics, 1963, 5, 95-117.
- Cockburn, B., and Ross, A. Essays. Teaching in Higher Education Series: 8. University of Lancaster, 1978.
- Coffman, W.E. Essay examinations. In R.L. Thorndike (Ed.), Educational Measurement. Washington: American Council on Education, 1971.
- Fostvedt, D.R. Criteria for the evaluation of high-school English composition. Journal of Educational Research, 1965, 59, 3, 108-112.
- Gosling, G.W.H. Marking English Compositions. Victoria: Australian Council for Educational Research, 1966.
- A Guide to the Writing of Essays. English Department, University of Canterbury, 1979.
- Hall, W.C., and Neal, L.F. Students' English expression at the University of Adelaide. Vestes, 1976, 19, 2, 30-33.
- Hartog, P.J., and Rhodes, E.C. The Marks of Examiners. London: MacMillan, 1936.
- Keeling, B., and Nuthall, G.A. Changes in personal value-structure during early and middle adolescence. The Australian Journal of Education, 13, 1, 1969.

- Leggett, G., Mead, D.C., and Charvat, W. Prentice-Hall Handbook for Writers. 7th ed. New Jersey: Prentice-Hall, 1978.
- Many Elite Illiterate. Christchurch Star, 21 July 1978.
- Marshall, J.C., and Powers, J.M. Writing neatness, composition errors, and essay grades. Journal of Educational Measurement, 1969, 6, 97-101.
- Myklebust, H.R. Development and Disorders of Written Language. New York: Grune and Stratton, 1965.
- Nimmo, D.B. The undergraduate essay: a case of neglect? Studies in Higher Education, 1977, 2, 2, 183-189.
- Palmer, O.E. Evaluation of communication skills. In P.L. Dressel *et al.* (Eds), Evaluation in Higher Education. Boston: Houghton-Mifflin, 1961, pp. 192-226.
- Payne, D.A. The Assessment of Learning: Cognitive and Affective. Massachusetts: D.C. Heath, 1974.
- Poole, M.E. Social Class and Language Utilization at the Tertiary Level. St. Lucia: University of Queensland Press, 1976.
- Stalnaker, J.M. The essay type of examination. In E.F. Lindquist (Ed.), Educational Measurement. Washington: American Council of Education, 1951, pp. 495-530.
- Surridge, O. Course planners under fire for 'insensitivity'. Times Higher Education Supplement, 30 December, 1977.
- Survey of Teaching and Assessment at the University of Canterbury in 1976. Part I: Assessment of Under-graduates. Report No. 42. Educational Research and Advisory Unit, University of Canterbury, 1977.
- Taylor, G. Coming to terms with English expression in the university. Vestes, 1978, 21, 3/4, 34-37.

The 1970 Freshers: How Did they Fare at University?

Part I: First Year Examination Performance.

Report No. 37. Educational Research and
Advisory Unit, University of Canterbury, 1976.

University Programmes in Remedial English. Report No. 19.

Educational Research and Advisory Unit, University
of Canterbury, 1973.

Winer, B.J. Statistical Principles in Experimental Design.

2nd ed. New York: McGraw-Hill, 1971.

Wiseman, S. The marking of English composition in grammar
school selection. British Journal of Educational
Psychology, 1949, 19, 200-209.

Writing, Setting and Marking Essays. Higher Education

Research Office, University of Auckland, 1979.

APPENDIX A

Sample Essay Writing Questionnaire (EWQ)

ESSAY WRITING QUESTIONNAIRE

Year at University (i.e., 1st, 2nd, etc.) _____ Sex _____

Subjects taken this year _____

Please tick the appropriate boxes: full-time ☐ student ☐ part-time ☐ student ☐Entry qualification: without a bursary ☐ bursary or higher ☐Age group: 20 or below ☐ 21-25 ☐ 26-30 ☐ 31-40 ☐ over 40 ☐Instructions

The following questions are intended to study the approach of university students to writing essays. Circle the appropriate letter on the right-hand side of the page. The letters represent the following responses:

- A - always
 O - often (about three-quarters of the time)
 S - sometimes (about half the time)
 R - rarely (about one quarter of the time)
 N - never

Please answer all questions as honestly and quickly as you can.

- | | | | | | |
|--|---|---|---|---|---|
| (1) I have difficulty keeping to word limits when writing essays | A | O | S | R | N |
| (2) I understand why I receive the marks I do | A | O | S | R | N |
| (3) I am easily distracted when writing essays | A | O | S | R | N |
| (4) I timetable my essay preparation | A | O | S | R | N |
| (5) I have more than one main idea in each paragraph | A | O | S | R | N |
| (6) I have trouble deciding what constitutes relevant material for my essays | A | O | S | R | N |
| (7) I write my introduction after I have written the rest of my essay | A | O | S | R | N |
| (8) Personal problems affect my ability to write essays | A | O | S | R | N |
| (9) I use headings and sub-headings to help with my essay preparation | A | O | S | R | N |
| (10) I write my essays the night before they are due | A | O | S | R | N |
| (11) I systematically check my essays for errors in spelling, punctuation and grammar | A | O | S | R | N |
| (12) I feel satisfied with my ability to write essays | A | O | S | R | N |
| (13) I think some parts of my essays relate less well to the essay questions than other parts do | A | O | S | R | N |
| (14) I write out my essays quickly | A | O | S | R | N |
| (15) I rearrange my essay headings and sub-headings before writing my essays | A | O | S | R | N |
| (16) I plan the general layout of my essays very carefully | A | O | S | R | N |
| (17) I question what I have written before I hand it in | A | O | S | R | N |

(18)	I would like to have more time to write my essays	A	O	S	R	N
(19)	I lack confidence in my essay writing ability	A	O	S	R	N
(20)	Before writing I carefully organise the specific content of my essays	A	O	S	R	N
(21)	I write essays slowly and painstakingly	A	O	S	R	N
(22)	I tend not to read my completed essay through from beginning to end	A	O	S	R	N
(23)	I begin writing my essays before I have collected all my notes	A	O	S	R	N
(24)	I tend to outline the content of each paragraph before I start to write it	A	O	S	R	N
(25)	I make sure I check my spelling before I hand in my essays	A	O	S	R	N
(26)	I am inclined to waffle in my essays	A	O	S	R	N
(27)	I'm constantly looking back through my essay while writing it	A	O	S	R	N
(28)	I receive good grades for my essays (i.e., B or higher)	A	O	S	R	N
(29)	I write my essays with little preparation	A	O	S	R	N
(30)	I reflect on my essays even while not writing them	A	O	S	R	N
(31)	I tend to skim over the comments on my returned essays	A	O	S	R	N
(32)	I change my mind about my essay's organisation while still writing it	A	O	S	R	N
(33)	I allow myself plenty of time to write my essays	A	O	S	R	N
(34)	I make detailed notes for each essay	A	O	S	R	N
(35)	I write my essays from beginning to end almost without a break	A	O	S	R	N
(36)	I find it difficult to begin writing	A	O	S	R	N
(37)	I'm uncertain about the precise expectations of my markers	A	O	S	R	N
(38)	I make notes for my essays roughly and quickly	A	O	S	R	N
(39)	I think the skills I learned at school are inadequate for writing university essays	A	O	S	R	N
(40)	I find it difficult to write legibly	A	O	S	R	N
(41)	I consult a dictionary repeatedly when writing essays	A	O	S	R	N
(42)	I leave things out I'd like to include in my essays	A	O	S	R	N
(43)	I discuss my grades with a staff member	A	O	S	R	N
(44)	I get stuck while writing essays	A	O	S	R	N
(45)	Once my essay is finished I am reluctant to alter it	A	O	S	R	N
(46)	Simple grammatical errors occur in my essays	A	O	S	R	N
(47)	I think essays are a waste of time and energy	A	O	S	R	N
(48)	I find discussions with fellow-students a useful aid in preparing for essays	A	O	S	R	N

(49)	In this Department I think markers are too generous in their marking	A	O	S	R	N
(50)	I feel relaxed when I'm writing essays	A	O	S	R	N
(51)	I think tutors are slipshod in their marking	A	O	S	R	N
(52)	I tend not to define within my essay important terms from the essay topic	A	O	S	R	N
(53)	I vary my rate of writing within each essay	A	O	S	R	N
(54)	In some parts of my essays I can't think of exactly the right words	A	O	S	R	N
(55)	The only content I use in my essays is material taken from books or lecture notes	A	O	S	R	N
(56)	I try to write as much as possible in each essay	A	O	S	R	N
(57)	While writing I refer to my outline summary	A	O	S	R	N
(58)	Comments on my essays make me change my technique in later ones	A	O	S	R	N
(59)	I keep checking the essay topic while writing essays	A	O	S	R	N
(60)	During the writing of my essays I have difficulty remembering what I've just written	A	O	S	R	N
(61)	I write my essays in little spurts	A	O	S	R	N
(62)	My friends allow me to read their essays	A	O	S	R	N
(63)	I can write for a long time without feeling tired	A	O	S	R	N
(64)	I think markers in this Department are too hard in their marking	A	O	S	R	N
(65)	I am apprehensive about using original ideas in my essays	A	O	S	R	N
(66)	I find the concluding paragraph of my essays the most difficult to write	A	O	S	R	N
(67)	I have difficulty keeping to one idea in long sentences	A	O	S	R	N
(68)	I juggle my material (notes, etc.) around before I write	A	O	S	R	N
(69)	I fail to make some points as clearly as I could in essays	A	O	S	R	N
(70)	I find it difficult to avoid padding my essays	A	O	S	R	N
(71)	When writing I keep asking myself whether I'm answering the essay question	A	O	S	R	N
(72)	While preparing my essays I retain the main ideas in my mind rather than jotting them down	A	O	S	R	N
(73)	At intervals I count how many words I've written in my essays	A	O	S	R	N
(74)	I have difficulty writing fast without making my handwriting untidy	A	O	S	R	N
(75)	I keep thinking of new ideas about the material in my essays while I'm writing	A	O	S	R	N
(76)	I have trouble working out the precise requirements of essay topics	A	O	S	R	N

APPENDIX B

Varimax rotated factor matrix for the 76 EWQ items

Table B.1

Varimax Rotated Factor Matrix for the 76 EWQ Items (N = 276)*

EWQ Items	1	2	3	4	5	Factor 6	7	8	9	10	11
1	-031	-102	-260	122	067	496	200	-018	042	-106	-028
2	322	-057	-041	171	-174	073	000	-123	335	-348	-086
3	443	229	-132	042	-088	-115	082	-315	-122	193	122
4	-023	378	084	-032	-352	025	175	-157	043	-157	157
5	063	-027	-238	288	-151	-033	074	-039	006	-123	-051
6	482	019	033	509	-135	111	027	-030	-008	-136	031
7	-259	-040	-161	076	-004	094	-040	118	226	300	294
8	470	171	-178	-097	-054	161	-034	073	-077	-158	288
9	026	082	017	038	-739	-017	-083	044	041	039	052
10	078	701	-141	-016	-011	064	214	-019	130	040	085
11	092	235	-073	150	-188	-049	727	-034	122	016	103
12	573	-055	026	355	-029	-224	033	159	-015	-034	-067
13	205	254	-149	420	-041	246	-077	-255	053	-015	056
14	-092	705	122	034	-067	093	092	049	-061	-022	066
15	-001	019	122	036	-657	-022	059	194	028	009	107
16	226	413	108	108	-609	040	117	-046	053	047	-038
17	098	185	143	231	-391	085	119	-253	338	-077	162
18	305	103	-290	-186	216	124	116	-064	-039	-132	-052
19	716	-023	-068	347	003	-076	-057	052	-103	-001	-020
20	158	411	-042	140	-463	-204	231	-004	086	088	-140
21	275	-618	-218	021	172	-016	-112	-159	-040	054	-015
22	069	105	-063	355	-005	064	617	-078	-080	-001	010
23	-070	280	-064	217	-154	-250	191	-187	-378	-027	-223
24	128	134	033	-033	-468	-012	265	-168	-008	-023	-002
25	029	180	-093	077	-150	-017	803	-040	052	004	025
26	167	220	-071	605	-036	183	051	046	020	025	066
27	-017	153	314	116	-135	151	384	269	205	-124	-056
28	304	067	276	543	-010	-194	095	078	033	-133	-178
29	096	695	037	126	-168	-137	052	017	006	037	008
30	009	150	276	219	-081	-280	121	-210	316	-094	122
31	-140	121	-053	264	-204	-176	-084	-171	018	-204	-127
32	-260	-029	302	-093	089	179	-001	367	257	063	234
33	228	663	-088	-144	-081	-057	234	-084	-037	-048	086
34	-031	584	-096	-022	-260	-177	041	064	075	-018	049
35	-123	454	005	132	073	130	054	450	142	102	-007
36	542	168	-103	068	043	214	-044	-319	175	173	-036
37	542	011	-009	278	-157	-026	-204	-198	017	-177	028
38	-032	563	-043	154	-099	002	-152	-120	-042	-028	-117
39	446	-009	-043	090	079	209	-020	041	-120	-383	-083
40	016	004	-637	181	050	-023	103	023	067	-077	-030
41	-124	087	088	-041	-322	106	333	026	-020	-026	-200
42	160	099	-527	008	103	089	-090	-082	-040	-033	053
43	-067	100	-054	112	-225	103	013	-105	-053	450	-091
44	613	-073	-059	216	015	-031	048	-171	-070	082	-102
45	146	206	164	205	065	157	-063	-179	176	133	356
46	070	056	-159	495	181	-175	254	063	066	-013	046
47	228	133	-231	216	-054	-259	048	059	158	-062	-032
48	-218	-002	-092	-051	-165	-016	-088	-093	269	159	-473
49	-207	122	-282	005	-094	-279	-045	078	-061	-267	250
50	631	-025	005	038	070	113	158	-002	070	119	072
51	-104	115	-188	023	-067	105	084	-123	-046	-672	036
52	264	278	-054	424	037	-204	-081	-058	070	-180	-163
53	-006	-173	241	089	-192	009	-002	314	-036	064	-064
54	392	027	-216	378	-022	095	013	-378	027	024	080
55	022	-120	119	524	-056	043	083	041	087	-013	011
56	054	055	-044	195	-039	600	-015	045	-186	083	-067
57	-018	102	-080	094	-721	-089	-008	-014	005	-035	-172
58	-225	195	-032	033	-317	049	017	-216	260	035	023
59	-178	128	-265	069	-162	-095	137	189	476	-017	-180
60	118	-037	-117	376	-010	084	166	-324	-179	120	177
61	110	-043	019	015	034	002	061	-706	-116	-049	031
62	-141	077	-093	-054	-076	-216	038	-100	-009	-034	655
63	478	-092	038	011	-038	-299	127	-326	138	099	095
64	-030	015	-119	295	-035	-080	-004	043	167	-607	003
65	453	-131	070	368	-007	177	-006	099	077	-085	-043
66	142	-061	-106	362	022	294	-004	-037	232	-047	023
67	103	-137	-306	501	-092	047	100	038	-048	-165	-040
68	-041	105	-107	-020	-321	-251	164	334	-043	-017	112
69	342	167	-176	461	-162	-048	-009	-180	-085	107	061
70	160	121	-004	602	-064	142	069	-002	-016	100	011
71	040	163	-101	081	-164	-162	155	153	566	-039	-092
72	-012	213	-224	053	-364	086	091	220	-097	058	056
73	-166	-054	-081	-068	155	004	319	129	154	-080	-305
74	045	-134	-639	075	-026	089	083	-036	021	-027	003
75	-013	-085	372	-020	190	-084	-005	054	537	-055	-033
76	494	022	-144	362	-217	-079	-076	-168	-024	-094	082
Eigenvalue	9.243	6.042	3.089	2.845	2.504	2.127	2.048	1.868	1.712	1.640	1.575
Variance Contribution	12.2	8.0	4.1	3.7	3.3	2.8	2.7	2.5	2.3	2.2	2.1

*Decimals have been omitted

APPENDIX C

Results of the remainder of factorised EWQ data
multivariate analyses of variance

Tables C1 - C23

Table C1

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Status by Age Interaction Effect

Test of roots 1 through 1	F 1.40	df(hyp) 11.00	df(error) 250.00	p less than 0.175	R* 0.24
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.41	21.35	0.525	-0.30	
Factor 2	0.02	0.43	0.891	0.01	
Factor 3	1.86	12.93	0.174	-0.41	
Factor 4	0.96	24.03	0.328	0.49	
Factor 5	1.24	24.73	0.266	-0.47	
Factor 6	0.82	2.52	0.365	0.23	
Factor 7	0.63	6.52	0.427	0.19	
Factor 8	0.39	0.46	0.535	0.27	
Factor 9	4.49	16.33	0.035	0.56	
Factor 10	1.26	3.63	0.263	-0.38	
Disgrade	0.35	0.32	0.556	0.17	

*Canonical correlation between artificial ANOVA variables and criteria

Table C2

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Subject by Qualification by Age Interaction Effect

Test of roots 1 through 1	F 0.50	df(hyp) 11.00	df(error) 250.00	p less than 0.901	R* 0.15
			UNIVARIATE F TESTS		
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.12	61.77	0.290	0.40	
Factor 2	0.18	4.06	0.673	0.28	
Factor 3	1.83	12.97	0.177	0.54	
Factor 4	0.10	2.75	0.751	-0.16	
Factor 5	0.41	8.12	0.523	-0.38	
Factor 6	0.88	2.69	0.348	-0.53	
Factor 7	0.00	0.04	0.952	-0.07	
Factor 8	0.79	0.95	0.376	0.29	
Factor 9	0.00	0.00	0.980	0.08	
Factor 10	0.69	1.94	0.408	0.24	
Disgrade	0.02	0.02	0.879	0.04	

*Canonical correlation between artificial ANOVA variables and criteria

Table C3

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject by Status by Qualification by Age Interaction Effect

Test of roots 1 through 1	F 0.57	df(hyp) 11.00	df(error) 250.00	p less than 0.853	R* 0.16
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	3.46	182.38	0.064	0.95	
Factor 2	0.07	1.52	0.794	0.04	
Factor 3	0.39	2.82	0.532	0.30	
Factor 4	0.01	0.24	0.923	-0.39	
Factor 5	0.58	11.74	0.447	0.34	
Factor 6	0.26	0.81	0.608	-0.21	
Factor 7	0.06	0.63	0.803	-0.24	
Factor 8	0.00	0.00	0.984	-0.14	
Factor 9	0.00	0.00	0.987	0.10	
Factor 10	0.19	0.53	0.668	-0.25	
Disgrade	0.22	0.20	0.643	-0.24	

*Canonical correlation between artificial ANOVA variables and criteria

Table C4

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Status by Age Interaction Effect

Test of roots 1 through 1	F 1.43	df(hyp) 11.00	df(error) 250.00	p less than 0.159	R* 0.24
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.12	6.42	0.727	-0.17	
Factor 2	2.38	54.63	0.124	0.40	
Factor 3	0.49	3.42	0.484	-0.25	
Factor 4	0.86	21.42	0.355	0.39	
Factor 5	0.67	13.36	0.413	0.07	
Factor 6	2.06	6.29	0.152	0.43	
Factor 7	0.00	0.01	0.978	-0.15	
Factor 8	5.10	6.07	0.025	-0.60	
Factor 9	0.75	2.71	0.389	-0.36	
Factor 10	1.49	4.30	0.224	-0.27	
Disgrade	1.19	1.08	0.277	0.16	

*Canonical correlation between artificial ANOVA variables and criteria

Table C5

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Status by Age Interaction Effect

Test of roots 1 through 1	F 2.15	df(hyp) 11.00	df(error) 250.00	p less than** 0.018	R* 0.29
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.00	0.02	0.985	0.15	
Factor 2	2.47	56.70	0.117	0.29	
Factor 3	2.83	19.67	0.094	0.47	
Factor 4	2.09	52.13	0.150	-0.72	
Factor 5	1.31	26.10	0.253	0.23	
Factor 6	0.46	1.40	0.498	-0.12	
Factor 7	1.75	18.01	0.187	0.22	
Factor 8	0.59	0.70	0.445	0.24	
Factor 9	5.52	20.09	0.020	0.50	
Factor 10	1.00	2.90	0.317	0.14	
Disgrade	2.42	2.20	0.121	-0.36	

*Canonical correlation between artificial ANOVA variables and criteria

**It will be noted that this three-way interaction of Sex, Status and Age is statistically significant. The interaction has been thoroughly investigated but it is virtually impossible to interpret sensibly. It is interesting to note, however, that this three-way interaction applies only to Factor IX. This factor does not feature as a significant dependent variable in any of the other analyses, and no discussion of the interaction has been included in the body of the text.

Table C6

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Age Interaction Effect

Test of roots 1 through 1	F 1.13	df(hyp) 11.00	df(error) 250.00	p less than 0.340	R* 0.22
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.02	0.85	0.899	0.02	
Factor 2	0.03	0.74	0.857	-0.05	
Factor 3	0.99	6.91	0.320	-0.41	
Factor 4	0.87	21.80	0.351	0.28	
Factor 5	0.00	0.01	0.983	-0.19	
Factor 6	0.07	0.23	0.785	-0.05	
Factor 7	0.03	0.29	0.867	-0.11	
Factor 8	3.66	4.36	0.057	-0.58	
Factor 9	2.02	7.34	0.157	0.27	
Factor 10	2.61	7.53	0.108	0.55	
Disgrade	1.24	1.12	0.267	0.46	

*Canonical correlation between artificial ANOVA variables and criteria

Table C7

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject by Status Interaction Effect

Test of roots 1 through 1	F 1.57	df(hyp) 11.00	df(error) 250.00	p less than 0.109	R* 0.25
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	3.08	162.50	0.080	0.05	
Factor 2	3.23	74.08	0.073	0.33	
Factor 3	1.46	10.12	0.229	0.34	
Factor 4	3.63	90.70	0.058	0.39	
Factor 5	1.73	34.41	0.190	0.22	
Factor 6	0.00	0.01	0.956	-0.08	
Factor 7	0.60	6.15	0.440	-0.13	
Factor 8	5.55	6.61	0.019	0.61	
Factor 9	0.04	0.13	0.848	0.12	
Factor 10	1.71	4.95	0.192	-0.58	
Disgrade	0.02	0.02	0.887	-0.13	

*Canonical correlation between artificial ANOVA variables and criteria

Table C8

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject by Qualification by Age Interaction Effect

Test of roots 1 through 1	F 1.00	df(hyp) 11.00	df(error) 250.00	p less than 0.446	R* 0.21
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.07	3.75	0.794	0.06	
Factor 2	1.84	41.72	0.176	0.55	
Factor 3	0.01	0.05	0.932	-0.10	
Factor 4	0.03	0.75	0.868	-0.02	
Factor 5	2.37	47.15	0.125	-0.77	
Factor 6	0.00	0.00	0.969	-0.02	
Factor 7	0.68	6.78	0.411	0.24	
Factor 8	1.74	2.11	0.188	-0.37	
Factor 9	2.96	10.74	0.087	0.44	
Factor 10	0.01	0.02	0.941	0.00	
Disgrade	0.12	0.11	0.726	-0.04	

*Canonical correlation between artificial ANOVA variables and criteria

Table C9

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Qualification by Age Interaction Effect

Test of roots 1 through 1	F 1.59	df(hyp) 11.00	df(error) 250.00	p less than 0.101	R* 0.26
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.00	0.03	0.982	-0.04	
Factor 2	1.49	33.73	0.224	0.25	
Factor 3	0.27	1.94	0.601	0.07	
Factor 4	0.05	1.43	0.819	0.16	
Factor 5	2.91	57.88	0.089	0.40	
Factor 6	3.96	12.06	0.048	-0.44	
Factor 7	2.30	23.06	0.130	-0.65	
Factor 8	0.16	0.19	0.692	0.22	
Factor 9	5.23	18.99	0.023	0.57	
Factor 10	0.00	0.00	0.998	-0.09	
Disgrade	0.10	0.09	0.756	-0.09	

*Canonical correlation between artificial ANOVA variables and criteria

Table C10

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Subject by Qualification Interaction Effect

Test of roots 1 through 1	F 0.98	df(hyp) 11.00	df(error) 250.00	p less than 0.465	R* 0.20
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.19	10.25	0.667	0.25	
Factor 2	2.32	52.52	0.129	0.29	
Factor 3	0.15	1.09	0.695	0.06	
Factor 4	0.04	1.14	0.838	-0.29	
Factor 5	0.55	10.94	0.459	-0.08	
Factor 6	0.11	0.33	0.743	-0.14	
Factor 7	1.53	15.28	0.218	0.28	
Factor 8	1.21	1.47	0.272	-0.39	
Factor 9	0.52	1.91	0.470	0.15	
Factor 10	0.79	2.24	0.374	0.40	
Disgrade	5.04	4.60	0.026	0.72	

*Canonical correlation between artificial ANOVA variables and criteria

Table C11

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status by Qualification by Age Interaction Effect

Test of roots 1 through 1	F 1.52	df(hyp) 11.00	df(error) 250.00	p less than 0.125	R* 0.25
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	1.26	66.43	0.262	0.35	
Factor 2	0.67	15.06	0.413	0.09	
Factor 3	0.51	3.68	0.475	0.24	
Factor 4	1.40	34.81	0.238	0.23	
Factor 5	0.57	11.60	0.450	0.07	
Factor 6	0.58	1.77	0.449	-0.21	
Factor 7	0.04	0.36	0.850	-0.15	
Factor 8	6.96	8.19	0.009	-0.65	
Factor 9	2.24	8.35	0.136	0.36	
Factor 10	2.44	7.04	0.120	-0.52	
Disgrade	0.04	0.04	0.845	-0.01	

*Canonical correlation between artificial ANOVA variables and criteria

Table C12

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Subject by Status by Qualification Interaction Effect

Test of roots 1 through 1	F 0.45	df(hyp) 11.00	df(error) 250.00	p less than 0.932	R* 0.14
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	2.15	113,13	0.144	0.69	
Factor 2	0.03	0.65	0.865	0.12	
Factor 3	0.05	0.32	0.833	0.15	
Factor 4	0.00	0.01	0.984	-0.24	
Factor 5	0.13	2.69	0.716	0.24	
Factor 6	0.20	0.62	0.655	-0.21	
Factor 7	0.19	1.90	0.663	-0.26	
Factor 8	1.27	1.49	0.261	0.37	
Factor 9	0.68	2.54	0.410	-0.24	
Factor 10	0.24	0.68	0.628	-0.26	
Disgrade	0.32	0.29	0.574	-0.33	

*Canonical correlation between artificial ANOVA variables and criteria

Table C13

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Status by Age Interaction Effect

Test of roots 1 through 1	F 1.33	df(hyp) 11.00	df(error) 250.00	p less than 0.208	R* 0.24
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.39	20.42	0.534	0.27	
Factor 2	2.28	52.24	0.132	0.43	
Factor 3	3.43	23.87	0.065	-0.54	
Factor 4	2.30	57.39	0.131	-0.68	
Factor 5	0.01	0.25	0.911	-0.21	
Factor 6	0.01	0.03	0.924	0.20	
Factor 7	0.79	8.13	0.375	0.35	
Factor 8	2.85	3.40	0.093	-0.50	
Factor 9	0.55	1.99	0.460	0.09	
Factor 10	0.07	0.20	0.795	0.29	
Disgrade	0.39	0.35	0.534	0.18	

*Canonical correlation between artificial ANOVA variables and criteria

Table C14

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Age Interaction Effect

Test of roots 1 through 1	F 1.18	df(hyp) 11.00	df(error) 250.00	p less than 0.299	R* 0.22
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.80	42.31	0.371	-0.27	
Factor 2	0.80	18.30	0.372	0.31	
Factor 3	3.15	21.91	0.077	-0.27	
Factor 4	0.34	8.45	0.561	0.14	
Factor 5	0.38	7.52	0.539	0.12	
Factor 6	8.15	24.89	0.005	-0.71	
Factor 7	0.78	8.00	0.379	-0.28	
Factor 8	0.58	0.69	0.449	0.33	
Factor 9	0.08	0.28	0.781	0.04	
Factor 10	0.12	0.33	0.735	-0.08	
Disgrade	0.45	0.41	0.503	-0.22	

*Canonical correlation between artificial ANOVA variables and criteria

Table C15

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Subject by Status Interaction Effect

Test of roots 1 through 1	F 0.93	df(hyp) 11.00	df(error) 250.00	p less than 0.513	R* 0.20
			UNIVARIATE F TESTS		
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.01	0.62	0.914	0.09	
Factor 2	2.53	58.07	0.113	0.53	
Factor 3	0.00	0.03	0.952	-0.04	
Factor 4	0.00	0.01	0.987	-0.09	
Factor 5	0.69	13.75	0.407	0.11	
Factor 6	1.28	3.90	0.260	0.41	
Factor 7	0.36	3.75	0.547	-0.41	
Factor 8	0.38	0.46	0.537	-0.23	
Factor 9	0.01	0.04	0.918	-0.03	
Factor 10	0.24	0.68	0.628	-0.06	
Disgrade	5.16	4.68	0.024	0.63	

*Canonical correlation between artificial ANOVA variables and criteria

Table C16

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Age Interaction Effect

Test of roots 1 through 1	F 0.47	df(hyp) 11.00	df(error) 250.00	p less than 0.922	R* 0.14
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.08	4.18	0.778	0.23	
Factor 2	0.06	1.38	0.806	0.07	
Factor 3	0.34	2.33	0.563	-0.24	
Factor 4	0.07	1.86	0.786	-0.31	
Factor 5	0.28	5.61	0.596	0.24	
Factor 6	0.92	2.81	0.339	-0.35	
Factor 7	0.38	3.92	0.538	0.38	
Factor 8	0.00	0.00	0.974	-0.08	
Factor 9	0.28	1.01	0.598	-0.35	
Factor 10	0.17	0.49	0.682	0.20	
Disgrade	2.23	2.02	0.137	-0.70	

*Canonical correlation between artificial ANOVA variables and criteria

Table C17

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Status Interaction Effect

Test of roots 1 through 1	F 0.83	df(hyp) 11.00	df(error) 250.00	p less than 0.615	R* 0.19
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.50	26.45	0.479	0.05	
Factor 2	0.56	12.82	0.455	0.04	
Factor 3	0.01	0.09	0.908	0.13	
Factor 4	0.64	15.87	0.426	0.23	
Factor 5	2.65	52.67	0.105	0.49	
Factor 6	2.42	7.39	0.121	-0.53	
Factor 7	0.20	2.06	0.655	-0.07	
Factor 8	0.87	1.03	0.353	0.43	
Factor 9	1.71	6.22	0.192	0.43	
Factor 10	0.11	0.32	0.739	-0.30	
Disgrade	0.42	0.38	0.518	-0.31	

*Canonical correlation between artificial ANOVA variables and criteria

Table C18

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Status and Age: Sex by Subject Interaction Effect

Test of roots 1 through 1	F	df(hyp)	df(error)	p less than	R*
	0.80	11.00	250.00	0.643	0.18
UNIVARIATE F TESTS					
Variable	F(1,260)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Factor 1	4.44	234.15	0.036	-0.68	
Factor 2	0.04	0.90	0.844	-0.06	
Factor 3	2.94	20.45	0.088	-0.45	
Factor 4	0.79	19.82	0.374	0.11	
Factor 5	0.00	0.00	0.989	0.00	
Factor 6	2.25	6.86	0.135	-0.40	
Factor 7	0.06	0.56	0.815	0.09	
Factor 8	0.24	0.29	0.623	-0.05	
Factor 9	0.09	0.32	0.766	-0.04	
Factor 10	0.53	1.52	0.469	0.40	
Disgrade	0.09	0.08	0.765	-0.03	

*Canonical correlation between artificial ANOVA variables and criteria

Table C19

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Qualification by Age Interaction Effect

Test of roots 1 through 1	F 1.74	df(hyp) 11.00	df(error) 250.00	p less than 0.066	R* 0.27
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.02	1.26	0.880	-0.17	
Factor 2	6.22	141.20	0.013	0.56	
Factor 3	0.70	4.97	0.403	-0.36	
Factor 4	0.59	16.09	0.442	0.06	
Factor 5	0.06	1.09	0.815	-0.24	
Factor 6	0.08	0.25	0.773	-0.07	
Factor 7	3.21	32.16	0.074	0.38	
Factor 8	0.02	0.03	0.887	-0.12	
Factor 9	0.93	3.37	0.336	-0.43	
Factor 10	6.00	16.98	0.015	0.65	
Disgrade	0.07	0.06	0.795	0.06	

*Canonical correlation between artificial ANOVA variables and criteria

Table C20

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Subject by Qualification Interaction Effect

Test of roots 1 through 1	F 1.00	df(hyp) 11.00	df(error) 250.00	p less than 0.446	R* 0.21
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	2.50	137.40	0.115	0.38	
Factor 2	1.29	29.31	0.257	0.53	
Factor 3	0.10	0.73	0.749	-0.04	
Factor 4	0.47	12.87	0.492	0.01	
Factor 5	0.80	15.90	0.372	-0.42	
Factor 6	1.14	3.45	0.288	0.27	
Factor 7	0.06	0.59	0.809	-0.18	
Factor 8	4.18	5.07	0.042	0.51	
Factor 9	1.62	5.87	0.205	-0.27	
Factor 10	0.13	0.37	0.718	-0.18	
Disgrade	0.20	0.18	0.657	0.07	

*Canonical correlation between artificial ANOVA variables and criteria

Table C21

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Sex, Subject, Qualification and Age: Sex by Qualification Interaction Effect

Test of roots 1 through 1	F 0.60	df(hyp) 11.00	df(error) 250.00	p less than 0.825	R* 0.16
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.11	5.96	0.742	-0.12	
Factor 2	0.43	9.81	0.511	0.23	
Factor 3	0.52	3.71	0.470	-0.32	
Factor 4	0.02	0.66	0.876	-0.20	
Factor 5	0.00	0.01	0.985	-0.17	
Factor 6	0.01	0.02	0.934	-0.00	
Factor 7	0.27	2.74	0.601	0.16	
Factor 8	1.45	1.76	0.229	0.51	
Factor 9	2.24	8.13	0.136	0.55	
Factor 10	1.66	4.69	0.199	0.50	
Disgrade	0.00	0.00	0.949	0.12	

*Canonical correlation between artificial ANOVA variables and criteria

Table C22

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Status Main Effect

Test of roots 1 through 1	F 1.63	df(hyp) 11.00	df(error) 250.00	p less than 0.090	R* 0.26
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	10.48	551.64	0.001	0.66	
Factor 2	0.15	3.27	0.703	-0.14	
Factor 3	1.57	11.35	0.211	0.20	
Factor 4	6.92	172.44	0.009	0.44	
Factor 5	0.05	1.08	0.818	-0.06	
Factor 6	0.04	0.14	0.833	-0.17	
Factor 7	0.14	1.36	0.713	-0.26	
Factor 8	0.46	0.54	0.499	-0.30	
Factor 9	0.02	0.07	0.891	0.07	
Factor 10	0.02	0.06	0.885	-0.17	
Disgrade	1.74	1.57	0.189	-0.30	

*Canonical correlation between artificial ANOVA variables and criteria

Table C23

Multivariate Analysis of Variance (MANOVA) of Factorised EWQ Data Classified According to Subject, Status, Qualification and Age: Qualification Main Effect

Test of roots 1 through 1	F 1.67	df(hyp) 11.00	df(error) 250.00	p less than 0.080	R* 0.26
Variable	F(1,260)	Mean Square	UNIVARIATE F TESTS p less than	Standardized Discriminant Function Coefficients	
Factor 1	0.01	0.73	0.906	-0.27	
Factor 2	2.12	47.54	0.146	0.16	
Factor 3	0.55	3.98	0.458	0.19	
Factor 4	1.02	25.37	0.314	0.26	
Factor 5	0.08	1.62	0.778	-0.22	
Factor 6	0.84	2.59	0.359	-0.32	
Factor 7	7.46	74.45	0.007	0.59	
Factor 8	0.90	1.05	0.345	0.27	
Factor 9	0.09	0.33	0.766	0.03	
Factor 10	1.36	3.93	0.245	-0.32	
Disgrade	5.78	5.22	0.017	0.52	

*Canonical correlation between artificial ANOVA variables and criteria

APPENDIX D

Sample Marking and Significant Features of Essays
Written by Undergraduate Students Questionnaire (MSFQ)

THE MARKING AND SIGNIFICANT FEATURES OF ESSAYS
WRITTEN BY UNDERGRADUATE STUDENTS

Note

This questionnaire is part of a research project for a thesis which is attempting to delineate those aspects of essay-writing which undergraduate students need to improve in order to perform more successfully at University. The questions presented here are designed to provide material which will enable distinctions to be made between good and bad essay-writing practice. Inevitably, the questions have had to be framed round what you, as a marker, do when confronted with an essay which has to be assigned a grade. However, none of the questions is designed to serve as a check on what you do or do not do when you mark essays; rather they are intended to clarify the kinds of features which you react to when you set about marking essays. Confidential treatment will, of course, be given to all replies, and, at a later date, you will be briefed on the outcome of the questionnaire analysis.

Instructions

Please write detailed answers to each of the following questions. If you need to use additional paper please pin it to the questionnaire. Some questions require you to mark the appropriate column(s) only. Please work through pages one, two, three and four, before pages five and six. They give you an opportunity to present your own thoughts before reacting to the categories listed in the final questions.

1. What do you consider to be the main functions of undergraduate essays in your course?

2. When you are marking an essay what are the principal features which influence your overall assessment of the essay?

3. (a) What types of corrections do you make when marking an essay, i.e., in the text or margin?

(b) (i) Do you normally correct all / most / some / a few / one instance(s) of the things you mention? (Please circle the appropriate category.)

(ii) What guides you in determining the amount of correction?

(c) What kinds of things do you normally comment upon when marking an essay, i.e., as distinct from specific corrections?

(d) (i) Do you normally make reasonably detailed or fairly brief comments on essays?

(ii) In what circumstances do you vary the extent of your comments?

(e) (i) Is there normally a difference between the number and/or length of comments you put on good essays compared to those you put on poor ones?

(ii) If so, please explain why you make this distinction.

4. (a) Do you deduct marks for certain types of error?

(b) If so, please list the types of error.

(c) Could you indicate (i) the severity of the deduction?

(ii) why such a deduction is thought to be necessary?

5. What stands out most in your mind as (i) indicating a good essay?

(ii) indicating a poor / failing essay? (Please indicate which type.)

6. (a) To what extent do you assist students who want to improve their essay-writing skills?

(b) What advice would you give to a student who wanted to improve his essay-writing skills?

7. (a) Do you think first-year students are adequately prepared to cope with University writing demands?

(b) If not, can you outline (i) their deficiencies?

(ii) ways of improving this situation?

8. (a) How concerned are you about the presence of each of the following items in undergraduate essays?

	Serious Concern	Moderate Concern	Mild Concern	No Concern
a. greatly exceeding the suggested word length				
b. errors of fact				
c. untidy handwriting				
d. incorrect bibliographical details				
e. poor spelling of names, terms in course				
f. long, rambling paragraphs				
g. not providing a wide margin				
h. chunks of copied, unattributed material				
i. confused interpretation of the topic set				
j. irrelevant material				
k. inadequate reasoning				
l. simple grammatical errors				
m. omitting quote marks (i.e., with phrases or sentences)				
n. poorly connected paragraphs				
o. hasty construction (i.e., of whole essay)				
p. obscure meaning				
q. awkwardly expressed sentences				
r. use of the first-person				
s. poor punctuation				
t. sweeping generalisations				

9. How essential are the following features, in your view, in undergraduate essays?

Please place a tick in the appropriate column following the key provided:

- Demand: means that you would definitely penalise a student if he failed to do this
- Expect: means that you would probably penalise a student for failing to do this but not necessarily in every case
- Prefer: means that you would be unlikely to penalise a student for failing to do this but in exceptional circumstances you might do so
- Indifferent: whether or not the student has this makes no difference in terms of penalty

	Demand	Expect	Prefer	Indifferent
a. clear statement of intentions				
b. smooth transition between paragraphs				
c. holding a particular position on the topic/issue				
d. a punchline or observation of interest in the conclusion				
e. logical steps in the overall argument				
f. defining important terms in the question				
g. student's own ideas				
h. a discernible introduction				
i. wide reading on the topic				
j. sound reasoning				
k. absence of mechanical errors				
l. a clear style of writing				
m. one major idea in each paragraph				
n. impeccable grammar				
o. concise expression				
p. detailed evidence for controversial statements				
q. writing consistently on the topic				
r. a sense of flow				
s. material you consider significant				
t. clear structure (e.g. introduction/developmental section/conclusion)				